



# ADDENDUM TO THE PLAZA RESIDENCES FINAL ENVIRONMENTAL IMPACT REPORT NO. 1050

## PACIFIC GATEWAY RESIDENCES PROJECT (STATE CLEARINGHOUSE NO. 2002061128)

Prepared for

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## **SECTION 1.0 PURPOSE OF ADDENDUM**

This Addendum has been prepared in accordance with the provisions of the California Environmental Quality Act (CEQA) (*California Public Resources Code* §§21000 et seq.); the State CEQA Guidelines (Title 14, *California Code of Regulations* §§15000 et seq.); and the rules, regulations, and procedures for implementing CEQA as adopted by the City of Costa Mesa (City). Section 15164(a) of the State CEQA Guidelines states that “the lead agency or a responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred”. Pursuant to Section 15162(a) of the State CEQA Guidelines, a subsequent Environmental Impact Report (EIR) or Negative Declaration is only required when:

- (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:
  - (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
  - (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
  - (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
  - (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

*The Plaza Residences Final Environmental Impact Report (EIR) No. 1050* (hereafter referred to as “FEIR 1050”) was certified by the Costa Mesa City Council on January 20, 2004, as adequately addressing the potential environmental impacts associated with the Project.

The scope of the proposed Pacific Gateway Residences Project (“proposed Project”) is consistent with the concept presented in FEIR 1050. FEIR 1050 provides for development of 7.79 acres in the City to be developed with the 1901 Newport Plaza office/commercial building;

145 residential condominiums<sup>1</sup>; a 2-level, subterranean parking structure; and a 5-level, above-grade parking structure (“originally approved Project”). Approximately 4.18 acres of the 7.79-acre site is partially developed with the 1901 Newport Plaza office/commercial building, 32 condominium units, and the 5-level above-grade parking structure. The Pacific Gateway Residences Project proposes to construct the remaining dwelling units as 113 attached, for lease residential units and to construct a 5-level, (4-levels above-grade) parking structure instead of two levels of subterranean parking to serve the proposed residential uses.

The purpose of this Addendum is to analyze the potential differences between the impacts identified in FEIR 1050 for the remaining component of the originally approved Project and the impacts that would be associated with the current proposal. As described in detail herein, there are no new significant impacts resulting from these changes, nor are there any substantial increases in the severity of any previously identified environmental impacts. The potential impacts associated with these proposed changes would either be the same or less than the anticipated levels described in FEIR 1050. Therefore, in accordance with Section 15164 of the State CEQA Guidelines, this Addendum to the previously certified FEIR 1050 is the appropriate environmental documentation for construction-level approvals associated with the proposed Pacific Gateway Residences Project. In taking action on any of the approvals outlined in Section 3.0, Project Description, the decision-making body must consider the whole of the data presented in FEIR 1050 (discussed in more detail in Section 2.0, Project Background) and this Addendum to the FEIR.

Section 2.0 of this Addendum provides background information on the approved project, including actions taken by the City Council; Section 3.0 provides a description of the proposed actions associated with the proposed Pacific Gateway Residences Project. Section 4.0 presents an environmental analysis of the proposed Project. Appendix A, the Pacific Gateway Residences Project Mitigation Monitoring and Reporting Program, identifies the project design features, standard conditions of approval, and mitigation measures that are applicable to the Project. Section 5.0 presents the findings related to the environmental analysis of the proposed Project.

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<sup>1</sup> FEIR 1050 evaluated development of 161 residential condominium units; however, the City Council approved development of 145 residential condominium units at a density of 40 dwelling units per acre. Throughout this document, the maximum allowable number of residential units is generally referred to as 145, except where specific calculations from FEIR 1050 are referenced.

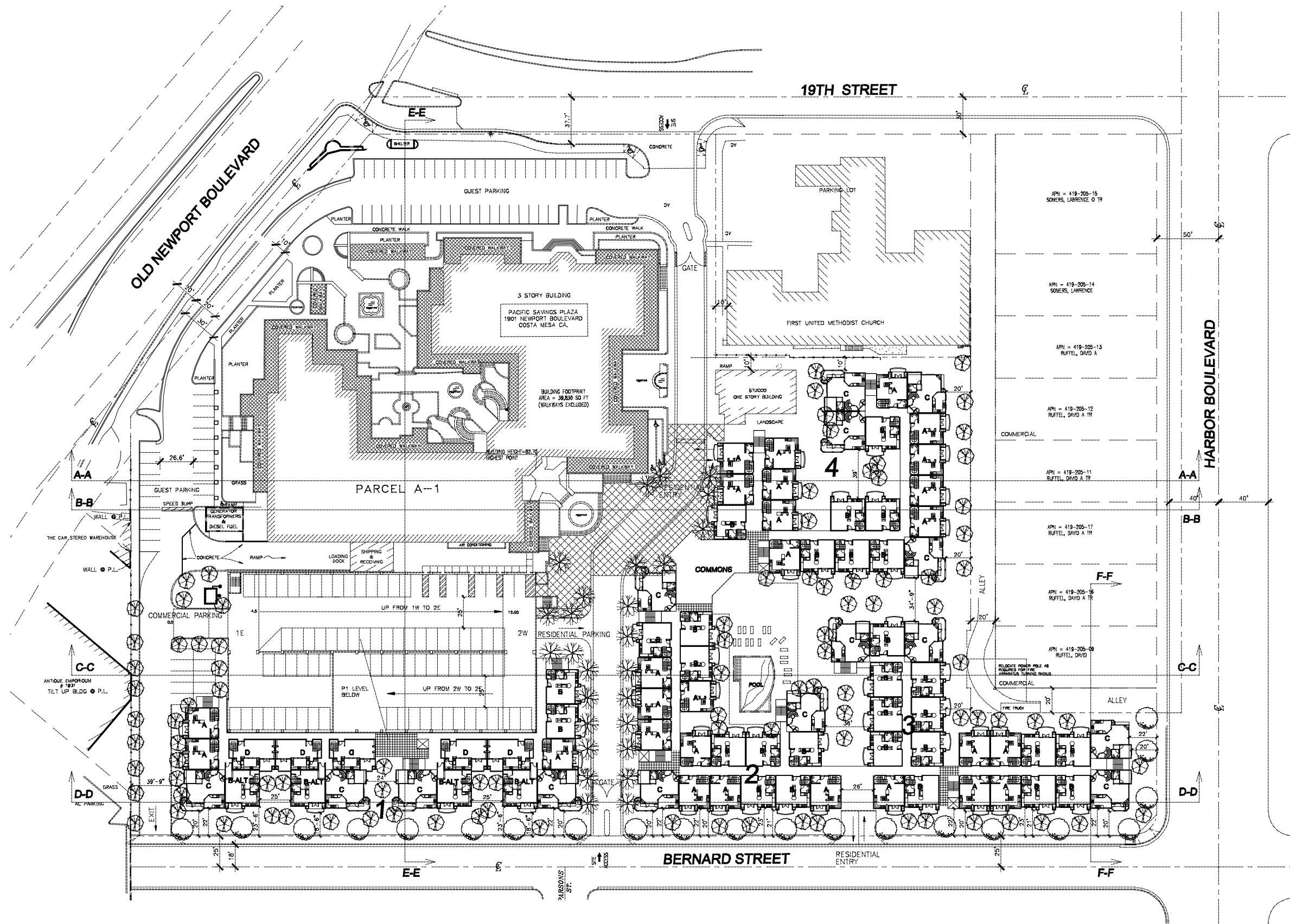
## **SECTION 2.0 PROJECT BACKGROUND**

The proposed Project would be implemented on 2.46 acres of the 7.79-acre site in the City of Costa Mesa (City). The site has been subject to previous planning efforts. The following section provides a summary of the planning efforts, which are integral to the proposed Project.

### **2.1 PLAZA RESIDENCES FINAL EIR 1050**

In 2003, the Plaza Residences EIR was prepared to address development on the northern 3.61 acres of the 7.79-acre site with high-density residential condominiums while retaining the existing 1901 Newport Plaza office building on the site. As shown on Exhibit 1, Previously Approved Plaza Residences Site Plan, the Project would allow 145 residential condominiums in 4 separate 4-story buildings with associated recreational amenities. Located below three of the four residential buildings, a two-level subterranean parking structure would exclusively serve residents of the development. A five-level parking structure would be constructed on the northeastern portion of the Project site (between the existing building and one of the proposed residential buildings) to serve both the 1901 Newport Plaza building and the residents and guests of the development. The Costa Mesa City Council certified FEIR 1050 on January 20, 2004. Since that time, 32 condominium units and a 5-level parking structure have been constructed.

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Source: Van Tilburg Banvard & Soderberg 2003

## Previously Approved Plaza Residences Site Plan

Addendum to FEIR 1050

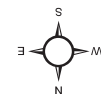


Exhibit 1

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## **SECTION 3.0**

### **PROJECT DESCRIPTION AND SETTING**

#### **3.1 PROJECT LOCATION**

The Pacific Gateway Residences Project site is located in the City of Costa Mesa (City) in Orange County, California. The Project site is located in downtown Costa Mesa, approximately one mile north of the City of Newport Beach and approximately two miles east of the City of Huntington Beach. The overall 7.79-acre site is generally bound by Bernard Street to the north, 19<sup>th</sup> Street to the south, Newport Boulevard to the east, and Harbor Boulevard to the west. A private access driveway traverses the site in a north-to-south direction. Approximately 4.18 acres of the site is currently developed with the 1901 Newport Plaza office building and another approximately 1.15 acres is developed with 32 condominium units, known as Pacifica at Newport Plaza. The remaining acreage (2.46 acres)—which is currently proposed for development with 113 attached, for lease residential units—exists as an asphalt-paved parking area with an undeveloped, grassy area at the corner of Bernard Street and Harbor Boulevard.

Exhibit 2, Regional Location, and Exhibit 3, Local Vicinity, depict the Project site in a regional and local context. Exhibit 4, Aerial Photograph, depicts the Project site relative to existing development.

#### **3.2 PROJECT SETTING**

The 7.79-acre Project site is flat with no distinguishing topographical features (e.g., hillsides, canyons). The site is approximately 87 feet above mean sea level (msl).

Approximately 4.18 acres of the 7.79-acre Project site are currently developed with the 1901 Newport Plaza office/commercial building. The 1901 Newport Plaza building is oriented toward the northwest corner of 19<sup>th</sup> Street and Newport Boulevard. The 3-story, 127,500-sf, Spanish Mission-style building is served by surface parking areas and a 488-space shared parking structure associated with the Pacifica at Newport Plaza condominiums. Within this structure, 391 spaces serve the tenants and guests of the 1901 Newport Plaza commercial office building while the remaining 97 spaces serve the residents and guests of Pacifica at Newport Plaza. Perimeter surface parking is located along the southern and the eastern borders with the majority of the spaces located behind the office/commercial use building within the parking structure. On-site vegetation includes a large grassy area between the western portion of the parking lot and the First United Methodist Church property; several large ornamental trees located on the corner of Harbor Boulevard and Bernard Street; and a landscaped setback running the length of the Project site along Bernard Street. As stated previously, another 1.15 acres on the Project site is developed with 32 condominium residences. Table 1, Proposed Project Statistics, provides an overview of the existing and proposed uses on the Project site.

**TABLE 1  
PROPOSED PROJECT STATISTICS**

Development Phase	Land Use	Area
1901 Newport Plaza Building	Office building	4.18 acres
Phase 1: Pacifica at Newport Plaza Residential Development	32 attached residential dwelling units	1.15 acres
Proposed Residential Project	113 attached residential dwelling units	2.46 acres
<b>Total</b>		<b>7.79 acres</b>
Overall Site Specific Density		40 dwelling units per acre <sup>a</sup>
Overall Site Specific Floor to Area Ratio (FAR)		0.70 FAR <sup>a</sup>
<sup>a</sup> General Plan Amendment GP-02-04 for site specific density, FAR, and building height adopted in January 2004.		

Surrounding land uses are predominately commercial with residential uses along Bernard Street. Land uses in the immediate vicinity of the Project site include:

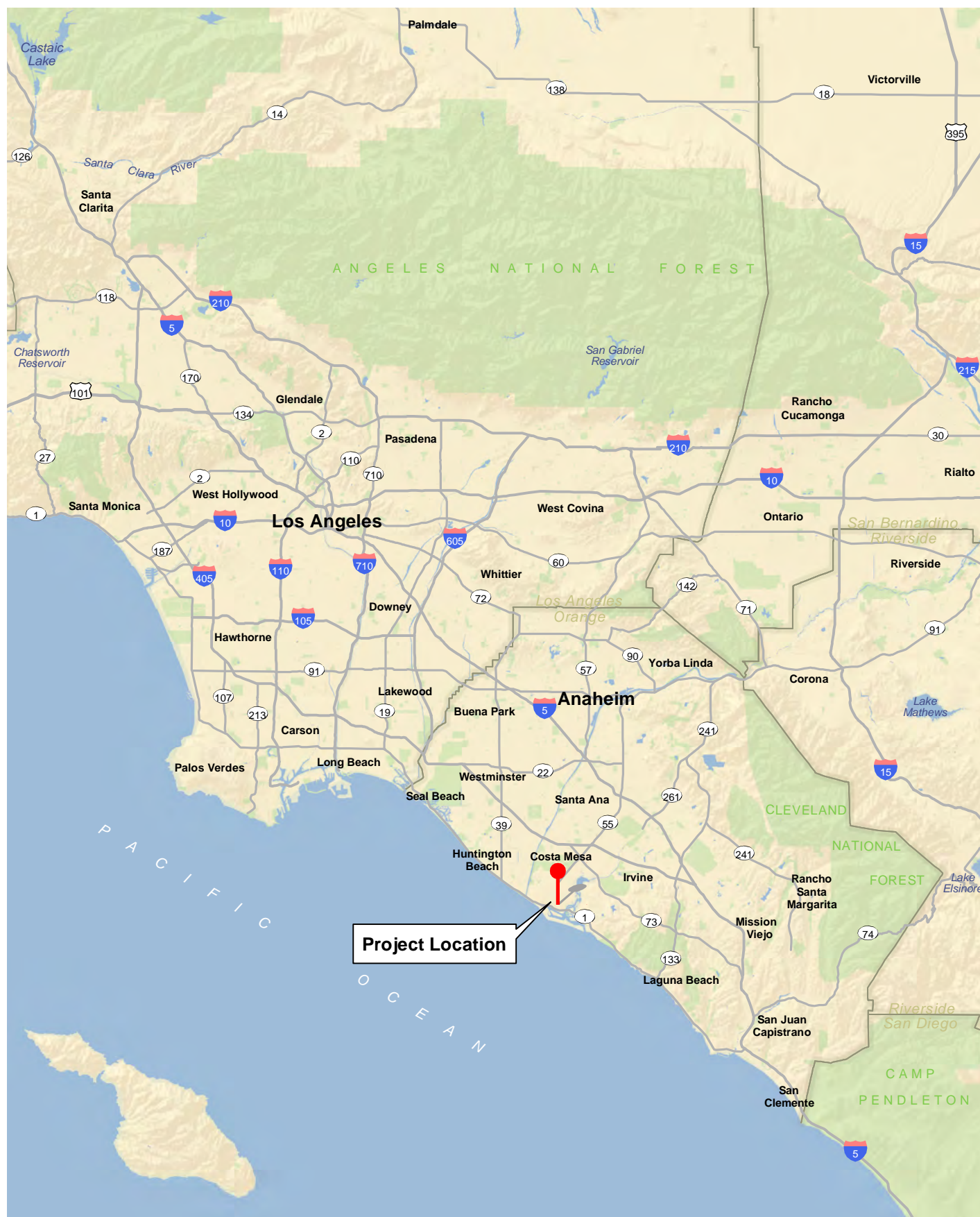
- **North of the Project Site.** Bernard Street borders the Project site to the north. Single-story residences are located on Bernard Street from Newport Boulevard to Parsons Street. Mixed-density residential uses are located north of Bernard Street. The service area of a Toyota automobile dealership that fronts onto Harbor Boulevard is located west of Parsons Street on Bernard Street.
- **South of the Project Site.** The Triangle Square retail plaza is located across from the Project site on the south side of 19<sup>th</sup> Street. The First United Methodist Church is located on the north side of 19<sup>th</sup> Street immediately west of the on-site 1901 Newport Plaza office building.
- **East of the Project Site.** Directly northeast and adjacent to the on-site Pacifica at Newport Plaza condominium units are two retail buildings. East of these uses and adjacent to the southeast portion of the Project site is Newport Boulevard.
- **West of the Project Site.** The northwestern portion of the Project site is adjacent to various businesses located in a strip commercial center that fronts onto Harbor Boulevard. Uses in the center include a dentist office, a printer shop, a salon, a restaurant, and a tailor.

### **3.3 PROJECT DESCRIPTION**

#### **Residential Development**

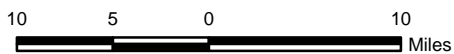
The Project Applicant proposes to construct 113 for-lease residential units on a 2.46-acre area, thereby completing the final phase of development on the 7.79-acre 1901 Newport Project site. A condominium map for the originally approved Project containing 145 residential units has been approved and recorded. If the units are built according to condominium standards, applicant has the option of selling the for-lease units in the future. Exhibit 5, Site Plan, and Exhibit 6, Architectural Elevation, depict the Project site plan and elevations. Table 2 identifies the number of residential units proposed in each wing of the residential development. The proposed Project would allow for the development of 113 attached, residential dwelling units (for lease as apartments with the ability to sell them in the future) in a single, 3- and 4-story building. As shown in Table 2, the proposed Project would include one-, two-, and three-bedroom residential units.





## Regional Location

Addendum to FEIR 1050



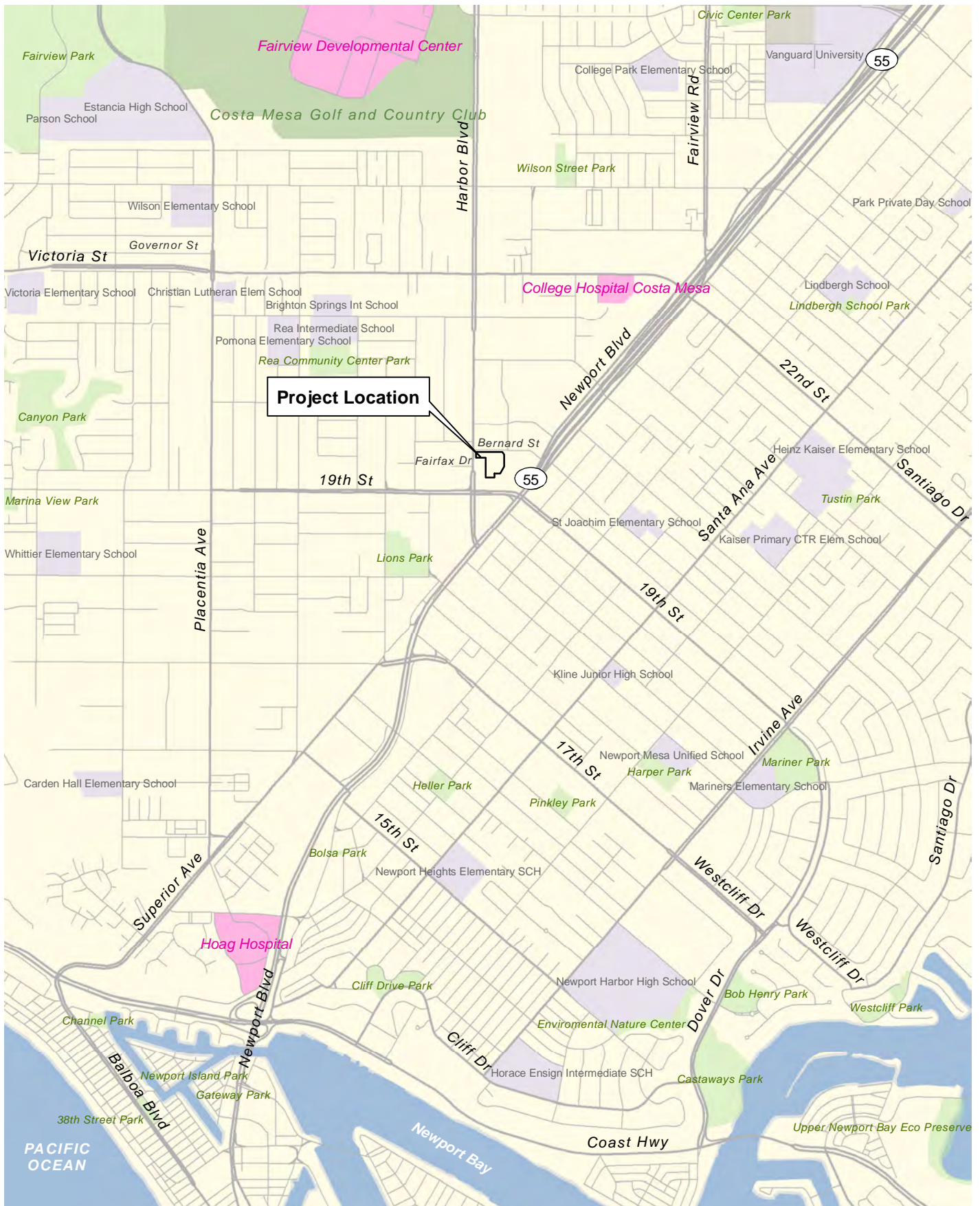
## Exhibit 2

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## Local Vicinity

Addendum to FEIR 1050



2,000 1,000 0 2,000 Feet

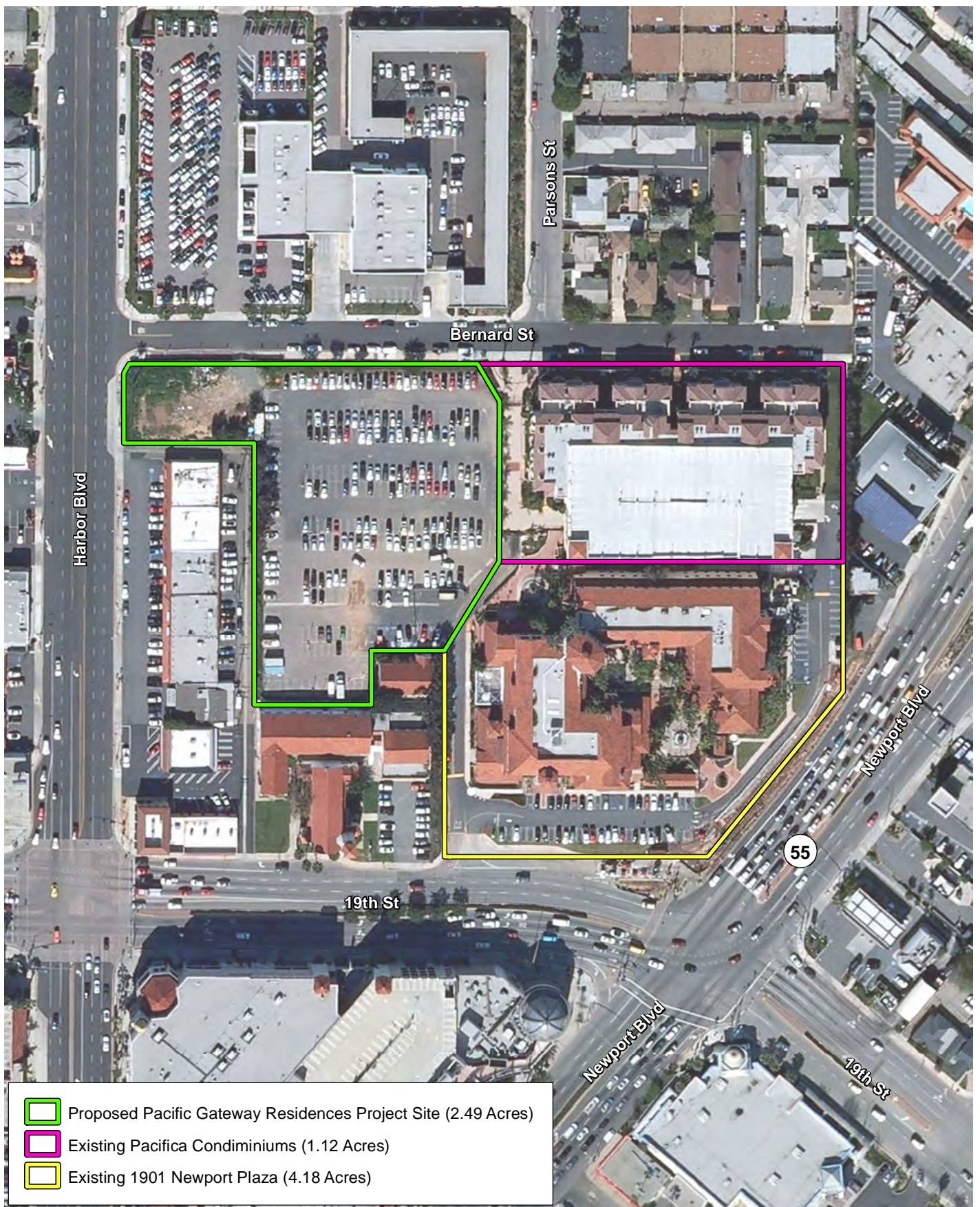
## Exhibit 3

**Bonterra**  
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## Aerial Photograph

Addendum to FEIR 1050



150 75 0 150  
Feet

Exhibit 4

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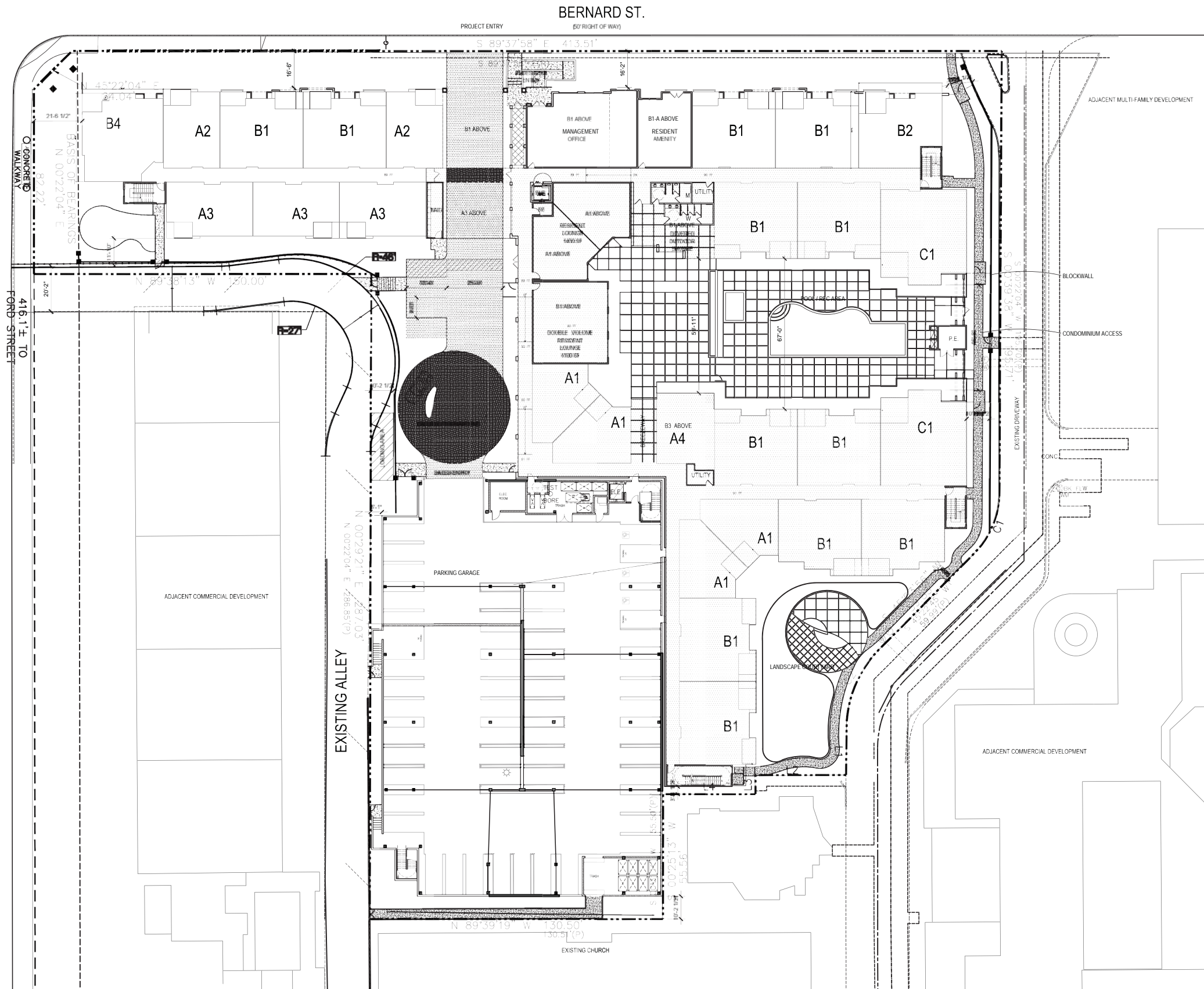
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HARBOR BLVD.  
(TOP RIGHT OF WAY)



DENOTES 4 STORIES

Source: Architects Orange 2011

# Site Plan

Addendum to FEIR 1050



## Exhibit 5

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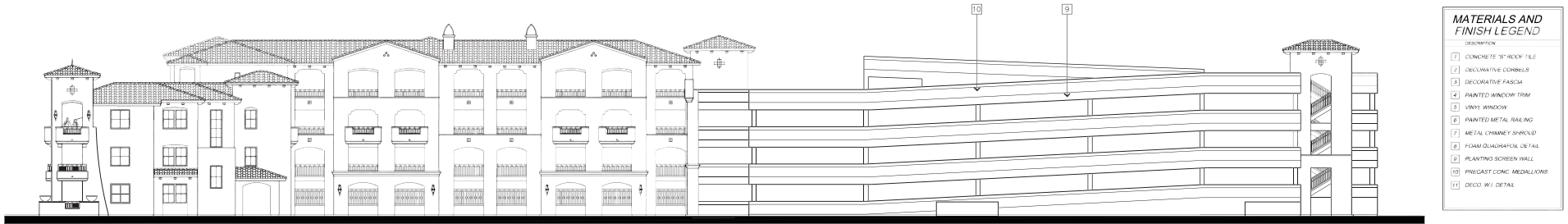




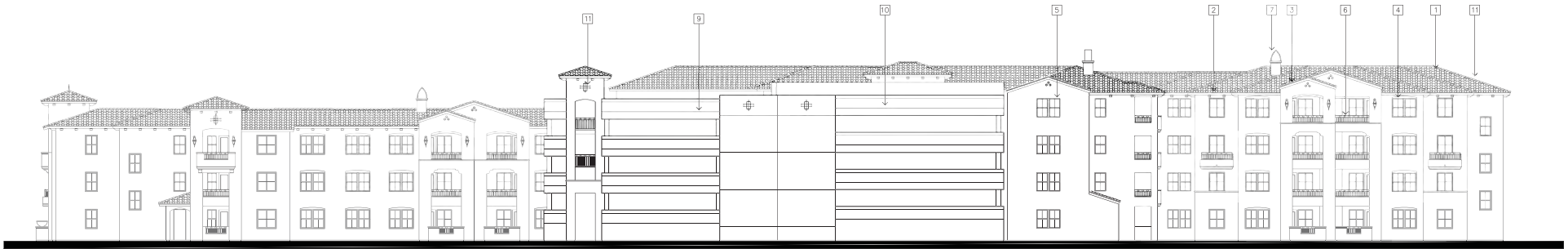
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NORTH ELEVATION (BERNARD ST.)



WEST ELEVATION (HARBOR BLVD.)



SOUTH ELEVATION



EAST ELEVATION

MATERIALS AND FINISH LEGEND	
DESCRIPTION	
1	CONCRETE 3" ROOF TILE
2	DECORATIVE CORBELS
3	DECORATIVE FASCIA
4	PAINTED WINDOW TRIM
5	VINYL WINDOW
6	PAINTED METAL RAILING
7	METAL CHIMNEY SHROUD
8	FOAM QUADRAGON DETAIL
9	PLANTING SCREEN WALL
10	PREFCAST CONC. MEDALLIONS
11	DECO. W.J. DETAIL

MATERIALS AND FINISH LEGEND	
DESCRIPTION	
1	CONCRETE 3" ROOF TILE
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11	DECO. W.J. DETAIL

Architectural Elevation

Addendum to FEIR 1050

Source: Architects Orange 2011

Exhibit 6





As shown on Exhibit 4, the majority of the units within the three-story portion of the building would be oriented onto Bernard Street with additional units facing to the south (toward Newport Boulevard) and to the west (toward the on-site access drive). The units within the four-story portion of the building would be located within the interior of the site, and would be oriented onto the proposed pool deck and patio. Each residence would be a single-story unit and would have a patio or balcony. Table 2 provides a statistical overview of the proposed residential uses.

**TABLE 2**  
**PACIFIC GATEWAY RESIDENCES DEVELOPMENT SUMMARY**

Building Area <sup>a</sup>	1 Bedroom	2 Bedroom	3 Bedroom	Total
1	10	14	2	26
2	12	19	2	33
3	12	20	2	34
4	7	11	2	20
<b>Total</b>	<b>41</b>	<b>64</b>	<b>8</b>	<b>113</b>
<sup>a</sup> The proposed Project would be constructed as a single building with multiple wings or areas.				

Measured from the grade, the proposed three-story portion of the residential building would be approximately 42 feet 9 inches in height, and the proposed four-story portion of the residential building would be approximately 47 feet 8 inches in height.<sup>2</sup>

### **Parking**

A three-story, four-level parking structure serving residents of the proposed Pacific Gateway residential building would be constructed between the existing church, the adjacent commercial development along Harbor Boulevard, and the southeast wing of the proposed residential building. As detailed in Table 3, the proposed parking structure would have 283 parking spaces, including 242 parking spaces for residents and 41 parking spaces for guests.

Parking would be available on each of the four levels plus rooftop parking; rooftop parking is provided in the existing parking structure on the Project site. Vehicular access to the parking structure would be from the Project entrance along Bernard Street. Access from the parking structure to each level of residential units would be provided via breezeways and walkways.

### **Access/Circulation**

Vehicular access to the proposed Project would be from the proposed Project entrance along Bernard Street. This entrance would be gated for security and would lead directly into the first (ground) level of the parking structure. Pedestrian access would also be available along Bernard Street and the private drive along the east side of the Pacific Gateway Residences Project site, which would separate the existing Pacifica at Newport Plaza condominium residences from the proposed Pacific Gateway Residences.

<sup>2</sup> Title 13 of the Costa Mesa Municipal Code defines building height as the distance from the grade to the highest point on the roof, including roof-top mechanical equipment and screening.

**TABLE 3  
PARKING SUMMARY**

Unit Type	Number of Units	Tenant Covered Parking	Tenant Open Parking	Guest Parking
One Bedroom	41	41	41	20.5
Two Bedroom	64	64	96	32
Three Bedroom	8	8	20	4
Subtotal Parking Before Credits		113	157	56.5
Covered Parking Credit			-28.25	
Guest Parking Credit				-15.75
Subtotal Parking After Credits		113	128.75	40.75
Total Tenant Parking				242
Total Guest Parking				41
Total Required Parking				283

### **Open Space and Landscaping**

Approximately 42 percent of the residential site area (approximately 0.98 acre) would be retained as open space through the provision of common open space and private patios and balconies. Common open space would be a landscaped courtyard located near the southeast wing of the residential development; a covered outdoor lounge/patio and pool area located near the northeast wing; and landscaped walkways and setback areas located along the edges of the proposed residential development with larger areas fronting Bernard Street and Harbor Boulevard. Along Harbor Boulevard, the proposed residential building would be set back approximately 21 feet from the existing concrete sidewalk. Along Bernard Street, the proposed buildings would be setback a minimum of 16.2 feet from the existing concrete sidewalk.

Landscaping is proposed along the perimeter of the Project site as well as within the open space areas, as depicted in Exhibit 7, Conceptual Landscape Plan. A four-foot-wide concrete walkway with a six-foot-high tubular steel fence is proposed along the eastern and southern edges of the site. A three-foot-high tubular steel fence on top of a three-foot-high concrete retaining wall is proposed along the site's northern perimeter. As shown on Exhibit 7, a six-foot-high masonry block wall is proposed along the Project's western and southwestern perimeters, adjacent to the existing commercial development along Harbor Boulevard.

### **Construction**

Construction of the proposed Project is expected to occur within 3 phases over a 28-month period. As shown on Exhibit 8, Construction Phasing Plan, the first phase would involve construction of 53 units, the leasing area, clubhouse, fitness area, and parking structure. The second phase would involve construction of 36 units and the third phase would involve construction of 24 units. It is anticipated that grading activities for the Project site would require approximately 3,000 cubic yards (cy) of cut and fill with no required import or export of soil. Because the proposed Project no longer proposes development of a two-level, subterranean parking structure beneath the residential units, the quantity of cut associated with soil excavation would be far less than what was originally analyzed and approved for FEIR 1050. Material storage and construction staging would be located on the project site, as shown on Exhibit 8.



## Exhibit 7

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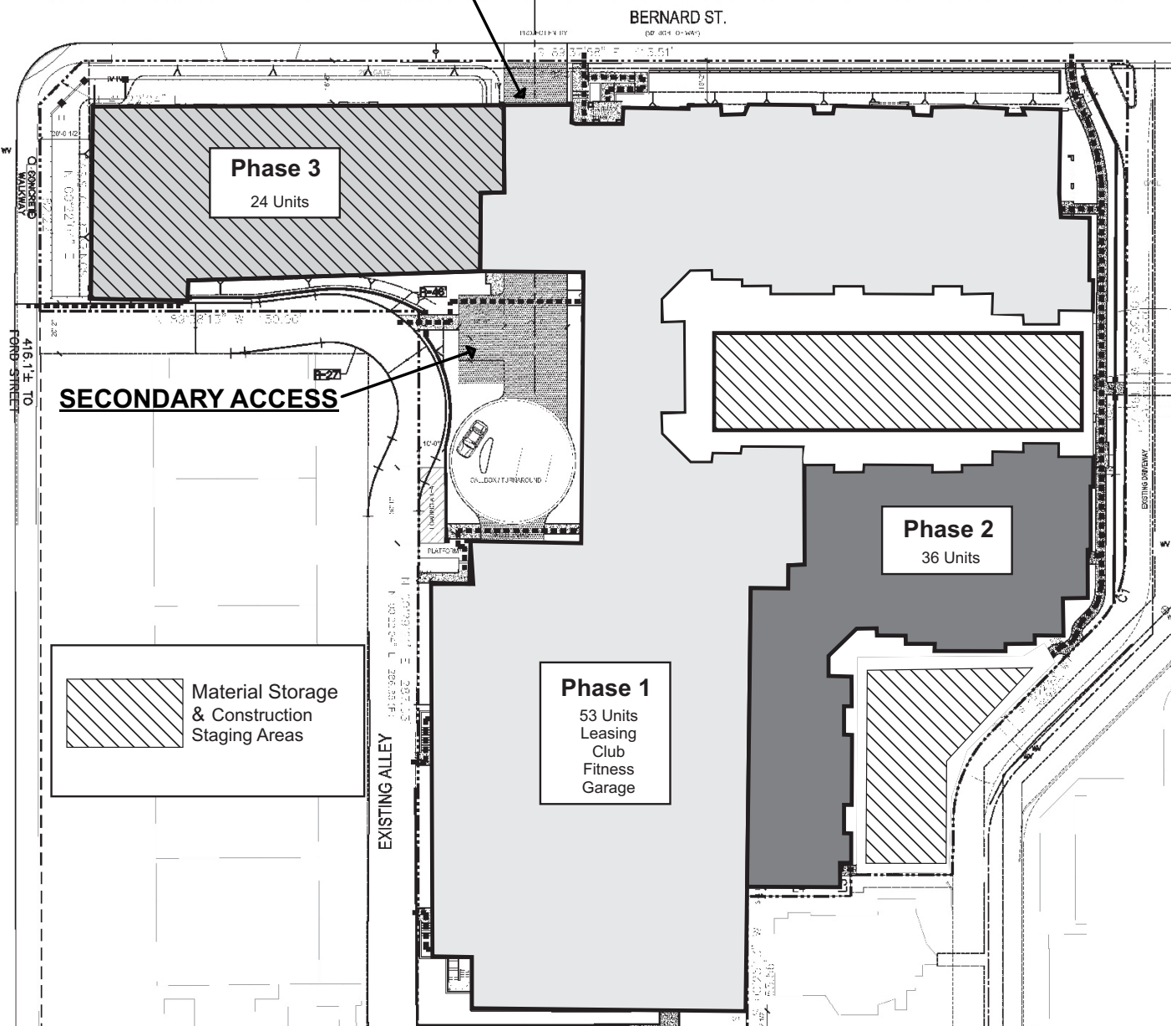


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## PRIMARY ACCESS



Source: Architects Orange 2012

## Construction Phasing Plan

## Exhibit 8

Addendum to FEIR 1050



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### **Requested Project Entitlements**

As part of the proposed Project, the Project Applicant is requesting approval of the following entitlements:

- Master Plan Amendment to the original approval for the construction of the remaining 113 attached residential units as a “for rent” apartment community. The architecture is similar to the proposed project. .
- Minor modification to reduce the street setback along Bernard Street from 20 feet to 16 feet.

### **3.4 COMPARISON TO ORIGINALLY APPROVED PROJECT**

As discussed previously, the proposed Project represents the final phase of development for the overall 7.79-acre mixed-use site.

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## **SECTION 4.0 ENVIRONMENTAL ANALYSIS**

Section 4.0 of this Addendum examines each environmental topical issue analyzed in FEIR 1050 specific to the proposed Project. The Addendum includes additional areas of analysis, including forestland resources and greenhouse gas emissions, pursuant to the 2010 amendments to the State CEQA Guidelines. The focus of this Addendum to FEIR 1050 is to evaluate the potential for changes in the impacts as a result of modifications to the proposed site plan, including the construction of a five level parking structure (4-levels above grade) instead of subterranean parking. This evaluation includes a determination as to whether the changes proposed for the Pacific Gateway Residences Project would result in any new significant impacts or a substantial increase in a previously identified significant impact.

The topical areas identified in the CEQA Environmental Checklist (Checklist) were used as guidance for this Addendum. For each section, a brief summary of the findings of FEIR 1050 is provided. This comparative analysis provides the City with the factual basis for determining if any changes in the Project, any changes in circumstances, or any new information since FEIR 1050 was certified require additional environmental review or preparation of a subsequent or supplemental EIR.

The mitigation program from FEIR 1050 applicable to the proposed Project is contained in the Mitigation Monitoring and Reporting Program (MMRP) included in Appendix A; no new mitigation measures are proposed.

### **4.1 AESTHETICS**

#### **4.1.1 SUMMARY OF PREVIOUS ENVIRONMENTAL ANALYSIS**

FEIR 1050 concluded that the Plaza Residences Project would result in less than significant impacts related to aesthetics. Specifically, the proposed Project would have no impacts on scenic resources or scenic vistas, as identified in the Costa Mesa 2000 General Plan. The implementation of project design features and standard conditions requiring replacement for the loss of ornamental trees would eliminate any impacts to the visual character or quality of the Project site or its surroundings.

As discussed in FEIR 1050, the significance threshold used in the shade/shadow analysis is as follows: a significant impact occurs when a project casts shade or shadow onto sensitive land uses in adjacent off-site areas for more than two hours between the hours of 10:00 AM and 3:00 PM. Residential lots located on the north side of Bernard Street are considered sensitive land uses. The landscaping located in the seven-foot-wide public right-of-way behind the curb face along Bernard Street is not considered a sensitive use.

Research of shade/shadow significance thresholds from local jurisdictions in Orange and Los Angeles Counties indicate that few jurisdictions have established thresholds related to shade/shadow impacts; of these jurisdictions, only the City of Los Angeles has a quantified significance threshold. The City of Los Angeles' threshold is as follows:

A project impact would normally be considered significant if shadow-sensitive uses would be shaded by project-related structures for more than three hours between the hours of 9:00 AM and 3:00 PM Pacific Standard Time (between late October and early April) or for more than four hours between the hours of 9:00

AM and 5:00 PM Pacific Daylight Time (between early April and late October)  
(source: City of Los Angeles CEQA Thresholds Guide, May 14, 1998).

Because there were no equivalent standard approaches in the industry for shade/shadow impacts at the time of EIR preparation and certification, the significance threshold developed for the analysis employed a conservative approach to defining sensitive uses and establishing a quantified threshold for identifying impacts. The significance threshold used in the analysis was more conservative than the threshold recommended and developed by the City of Los Angeles. Other local jurisdictions in Orange County with formally established thresholds do not quantify a significance threshold for shade/shadow impacts. Based on a shade/shadow analysis, it was determined that the Plaza Residences Project would result in less than significant impacts and no mitigation was required. Further, the implementation of specified project design features and standard conditions were found to eliminate any new sources of substantial light or glare which may adversely affect day or nighttime views in the area. The Project was found to conform to the 2000 General Plan Land Use Policy LU-1C.1 requiring that multi-story buildings not deprive existing land uses of adequate light and solar access.

#### **4.1.2 PROJECT ENVIRONMENTAL REVIEW**

The Project site and surrounding area are located within a highly urban portion of the City that does not contain any scenic vistas or resources and is not visible from State and local scenic highways. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects.

The proposed Project modifications would alter the type of residential units by altering the product type from “for sale” condominium units to for-lease residential units; however, the potential for future sale of the units would still exist. This change in product type would not affect the visual appearance of the Project or Project features. The proposed Project would replace two levels of subterranean parking with a four-level, above-grade parking structure. This parking structure would alter the Project’s anticipated visual appearance from what was evaluated in FEIR 1050. However, the structure would include uniformly distributed openings to the outside which would provide visual relief not found with a fully enclosed structure, and it would incorporate architectural features to complement the Spanish Mission-style architecture of the on-site 1901 Newport Plaza commercial/office building, the Pacifica at Newport Plaza condominium development, and the adjacent First United Methodist Church. Further, the proposed “open” parking structure would be similar in appearance to the proposed residential buildings as well as the residential buildings that were analyzed in FEIR 1050 and approved for development on the Project site. Although the First United Methodist Church would experience a change in views from the existing condition, the proposed Project would be similar in overall appearance to the approved Plaza Residences Project, as evaluated in FEIR 1050.

A shade/shadow analysis was prepared as a part of this Addendum to evaluate the duration of shade/shadow effects on shade-sensitive uses (i.e., the residential lots located on the north side of Bernard Street, not including landscaping located in the seven-foot-wide public right-of-way behind the curb face along Bernard Street). The shade and shadow analysis was conducted for three times of the year: the summer solstice on June 21 when the sun is highest in the sky, the autumnal equinox on September 23, and the winter solstice on December 21 when the sun is lowest in the sky. The environmental threshold of significance defines a significant shadow impact occurring when more than two hours of shade/shadow are cast on sensitive uses between 10:00 AM and 3:00 PM.

For the proposed Project, shadow conditions were analyzed at 9:00 AM, noon, and 3:00 PM for each of the three days (June 21, September 23, and December 21). Exhibits 9 through 11, (Shade and Shadow Analysis- Summer Solstice – June 21, 2015, Shade and Shadow Analysis – Autumn Equinox – September 23, 2015, and Shade and Shadow Analysis – Winter Solstice – December 21, 2015), depict the locations and length of shadows for the three times of year. As shown, shadows from the Pacific Gateway Residences Project would not extend onto adjacent shade-sensitive land uses. Therefore, consistent with the findings of FEIR 1050, shade and shadow impacts associated with the proposed Project are considered less than significant. No new impacts would occur, and no mitigation is required. Additionally, the proposed Pacific Gateway Residences Project conforms to the 2000 General Plan Land Use Policy LU-1C.1 requiring that multi-story buildings not deprive existing land uses of adequate light and solar access during the Summer and Spring seasons.

Overall, the proposed Project would be consistent with the project analyzed in FEIR 1050. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the proposed Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the Project is undertaken; and (3) would bring about no new information of substantial importance which would (a) create new significant impacts, (b) increase the severity of previously examined effects, (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures which are considerably different from those analyzed in the previous documents. For these reasons, there are no major revisions required to the aesthetics analysis provided in FEIR 1050.

## **4.2 AGRICULTURE AND FORESTRY RESOURCES**

### **4.2.1 SUMMARY OF PREVIOUS ENVIRONMENTAL ANALYSIS**

FEIR 1050 did not address agriculture and forestland resources. As set forth in the Initial Study prepared for FEIR 1050, the Project site is not located on or near agricultural land, nor is it currently in agricultural use. The Project site is not designated as Prime or Unique Farmland. The site has been historically developed and is located within a highly urbanized area. No impacts related to this environmental topic were anticipated as a result of Project implementation, and no mitigation measures were required.

### **4.2.2 PROJECT ENVIRONMENTAL REVIEW**

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forestry resources, including timberland, are significant environmental effects, lead agencies may refer to (1) information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project and (2) forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Data from the State of California Department of Conservation, Farmland Mapping and Monitoring Program, indicates that the Project site contains no land that is designated as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local

Importance (FMMP 2010), nor is the Project site zoned for agricultural use. In addition, the Project site is not in agricultural use or under Williamson Act contracts, and no such designated land is nearby. Therefore, the proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects related to agricultural resources.

Since the Project site is in an urban area, no changes would result in conversion of farm or forest land to non-agricultural or non-forest uses. The site is not considered to be farmland of significance or land in agricultural use. The Project site is not defined as forest land according to Section 12220(g) of the *California Public Resources Code*, which defines forest land as “land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits”, nor is it zoned for Timberland Production as defined by Section 51104(g) of the *California Government Code*. Therefore, no new impacts related to agricultural and forestry resources would occur. Although the forest land resources were not an environmental topic of concern when EIR 1050 was prepared, there are no environmental impacts associated with this issue; therefore, this does not preclude the use of an addendum to the previous document.

The proposed Project would be consistent with the Project as analyzed in FEIR 1050. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the proposed Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the Project is undertaken; (3) would bring about no new information of substantial importance which would (a) create new significant impacts, (b) increase the severity of previously examined effects, (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures which are considerably different from those analyzed in the previous documents. For these reasons, there are no major revisions required to the agriculture and forestry resources analysis provided in FEIR 1050.

#### **4.3 AIR QUALITY**

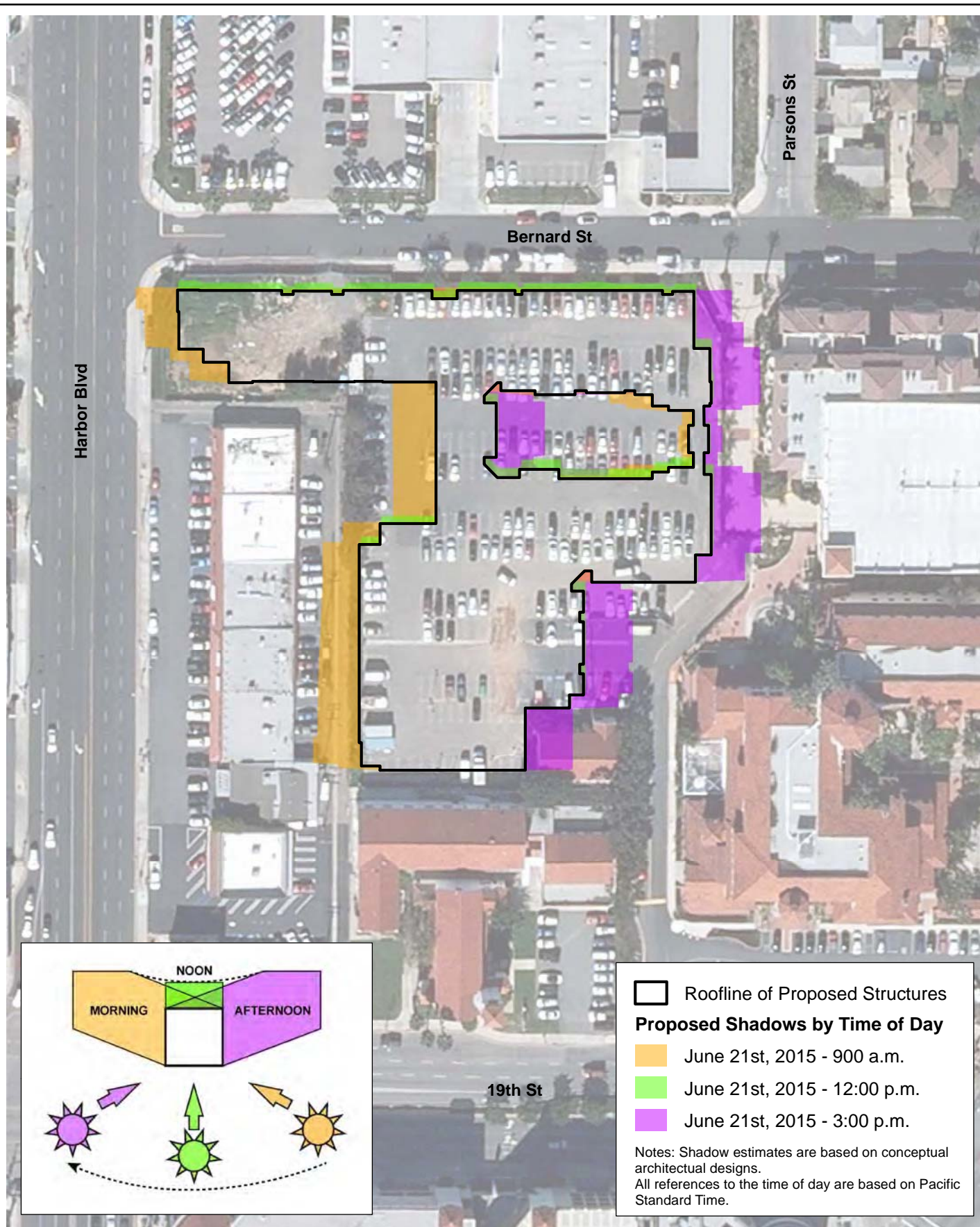
##### **4.3.1 SUMMARY OF PREVIOUS ENVIRONMENTAL ANALYSIS**

FEIR 1050 evaluated impacts related to air quality based on development of the 7.79-acre project site with 145 condominium units, two levels of subterranean parking, and a 5-level parking structure. The analysis assumed necessary soil excavation, largely associated with the subterranean parking, would total approximately 48,892 cubic yards of cut which would be exported to an off-site location. FEIR 1050 identified that construction-related Project emissions would exceed established thresholds for significant. Implementation of the proposed mitigation measures would minimize construction emissions to the maximum extent feasible. However, short-term, construction-related emissions would exceed South Coast Air Quality Management District (SCAQMD) thresholds for nitrogen oxides (NOx) and fine particulate matter with a diameter of 10 microns or less (PM10), resulting in significant and unavoidable emissions. No significant long-term operational impacts related to air quality were found to occur at the local and regional levels.

##### **4.3.2 PROJECT ENVIRONMENTAL REVIEW**

The national and State ambient air quality standards (AAQS) have been revised since the certification of FEIR 1050. Most notable are the addition of an 8-hour standard for ozone and

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## Shade and Shadow Analysis – Summer Solstice – June 21, 2015

Exhibit 9

Addendum to FEIR 1050



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Feet

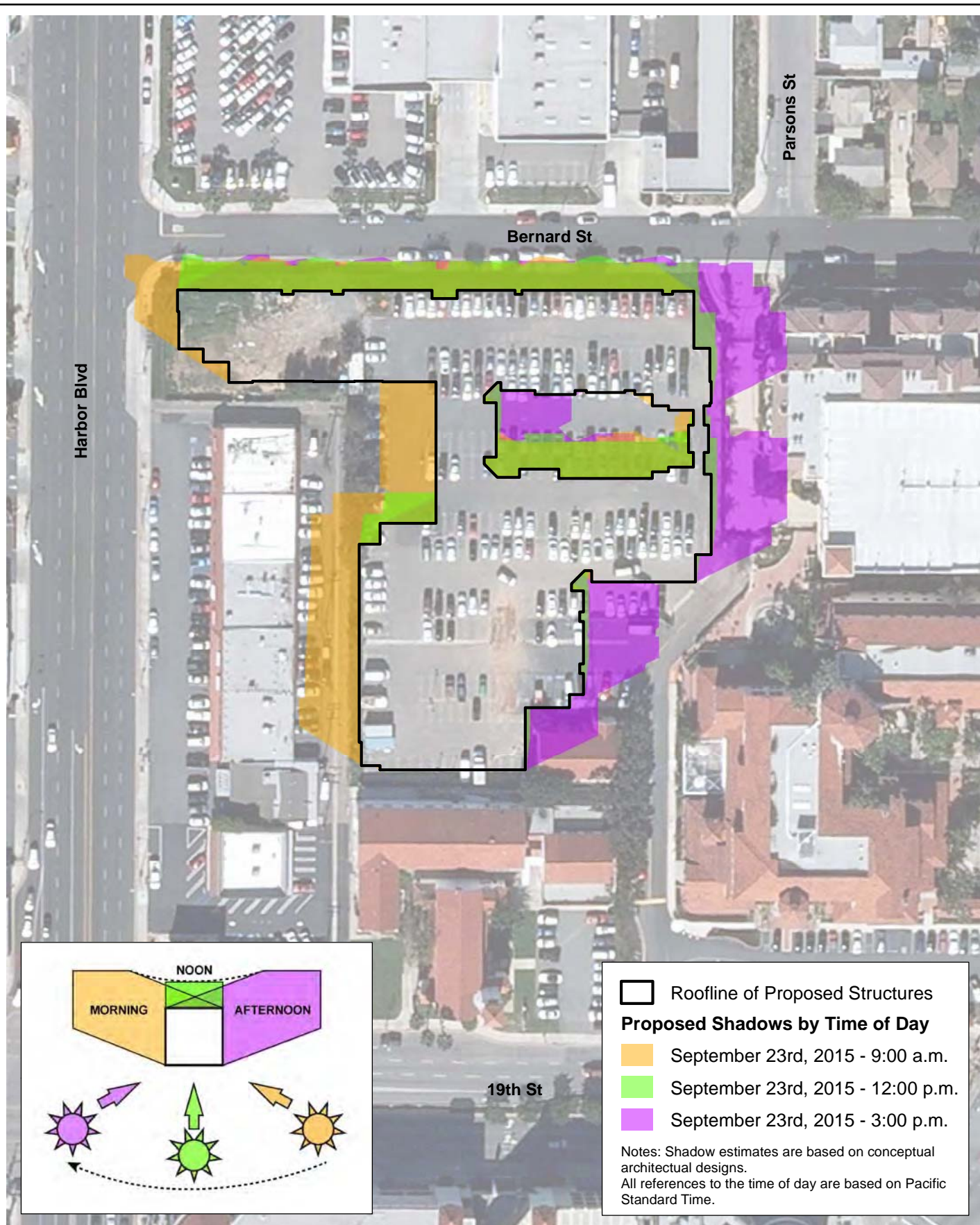
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## Shade and Shadow Analysis – Autumn Equinox – September 23, 2015

Exhibit 10

Addendum to FEIR 1050



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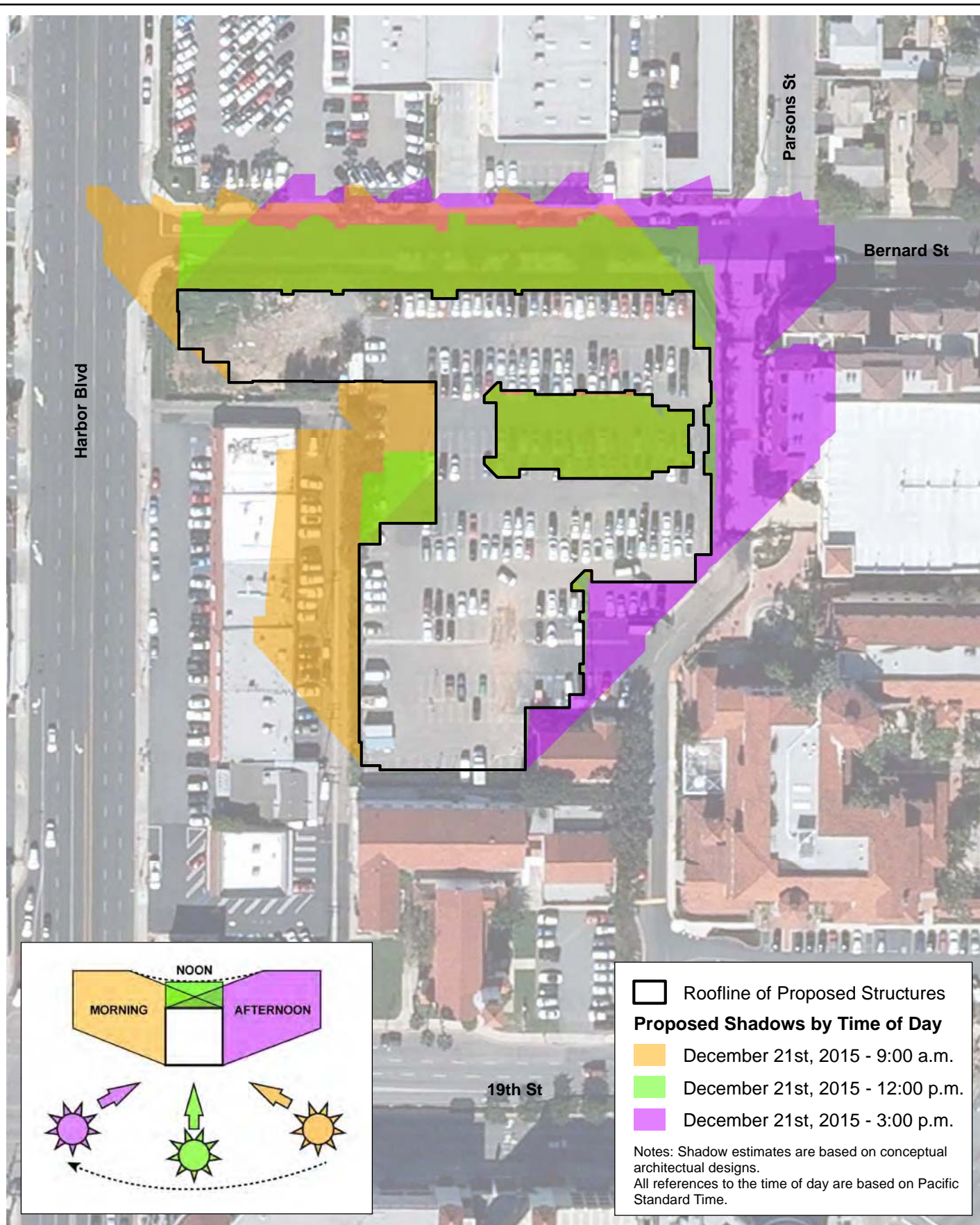
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## Shade and Shadow Analysis – Winter Solstice – December 21, 2015 Exhibit 11

Addendum to FEIR 1050



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the recognition of fine particulate matter, which is particulate matter of 2.5 microns or less in size (PM<sub>2.5</sub>) as a criteria pollutant. The current national and State AAQS are provided in Appendix B.

The SCAQMD *Final 2007 Air Quality Management Plan* (2007 AQMP) is the current air quality plan, adopted by the SCAQMD on June 1, 2007. The 2007 AQMP is an update to the 2003 AQMP and incorporates new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes, and new air quality modeling tools. The California Air Resources Board (CARB) approved the plan when the State Strategy for the State Implementation Plan (SIP) was adopted on September 27, 2007. The Draft SIP has been submitted to the United States Environmental Protection Agency (USEPA) for review and approval. Until such time that the USEPA approves the SIP, the 2003 AQMP remains in effect for federal Clean Air Act (CAA) conformity analysis. However, for CEQA analysis, projects must also be considered consistent with the requirements of the 2007 AQMP.

## Existing Air Quality

Table 4 provides the current status of attainment of federal and State ambient air quality standards (AAQS) in the South Coast Air Basin. The status has changed since the certification of FEIR 1050.

**TABLE 4**  
**CRITERIA POLLUTANT DESIGNATIONS IN THE SOUTH COAST AIR BASIN**

Pollutant	State	Federal
O <sub>3</sub> (1-hour)	Nonattainment	No Standard
O <sub>3</sub> (8-hour)		Extreme Nonattainment
PM <sub>10</sub>	Nonattainment	Serious Nonattainment
PM <sub>2.5</sub>	Nonattainment	Nonattainment
CO	Attainment	Attainment/Maintenance
NO <sub>2</sub>	Nonattainment	Attainment/Maintenance
SO <sub>2</sub>	Attainment	Attainment
Lead	Attainment/Nonattainment <sup>a</sup>	Nonattainment/Attainment <sup>d</sup>
All others	Attainment/Unclassified	No Standards
<sup>a</sup> Los Angeles County was reclassified from attainment to nonattainment for lead in 2010; the remainder of the SoCAB is in attainment of the State and federal standards. Source: CARB 2010b		

## Impact Analysis

### Significance Criteria

Appendix G of the State CEQA Guidelines notes that the significance criteria established by the applicable air quality management district may be relied upon to make significance determinations. The SCAQMD has established significance thresholds to assess the regional and localized impacts of project-related air pollutant emissions; Table 5 presents the most current significance thresholds. A project with daily emission rates, risk values, or concentrations below these thresholds is generally considered to have a less than significant effect on air quality.

As described above, the 2007 AQMP is the current air quality plan. The main purpose of an AQMP is to bring an area into compliance with the requirements of federal and State air quality standards. For a project to be consistent with the AQMP, the pollutants emitted from the project should not exceed the SCAQMD air quality significance thresholds or cause a significant impact on air quality. Also, a project should not plan development or otherwise have potential emissions that would substantially exceed the corresponding plans that were used to develop the AQMP.

**TABLE 5**  
**SCAQMD AIR QUALITY SIGNIFICANCE THRESHOLDS**

Mass Daily Thresholds <sup>a</sup>		
Pollutant	Construction	Operation
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
PM2.5	55 lbs/day	55 lbs/day
SOx	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants		
TACs <sup>b</sup>	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to Rule 402 <sup>c</sup>	
Ambient Air Quality For Criteria Pollutants <sup>d</sup>		
NO <sub>2</sub>	1-hour average ≥ 0.18 ppm Annual average ≥ 0.03 ppm	
PM10	24-hour average ≥ 10.4 µg/m <sup>3</sup> (construction) 24-hour average ≥ 2.5 µg/m <sup>3</sup> (operation) Annual average ≥ 1.0 µg/m <sup>3</sup>	
PM2.5	24-hour average ≥ 10.4 µg/m <sup>3</sup> (construction) 24-hour average ≥ 2.5 µg/m <sup>3</sup> (operation)	
Sulfate	24-hour average ≥ 1.0 µg/m <sup>3</sup>	
CO	1-hour average ≥ 20.0 ppm (State) 8-hour average ≥ 9.0 ppm (State/federal)	
lbs/day: pounds per day; ppm: parts per million; µg/m <sup>3</sup> : micrograms per cubic meter		
<sup>a</sup> Source: SCAQMD 2011.		
<sup>b</sup> Toxic air contaminants (carcinogenic and non-carcinogenic).		
<sup>c</sup> Rule 402 states that a project shall not “discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals”.		
<sup>d</sup> Ambient air quality threshold based on SCAQMD Rule 403.		

As demonstrated below, pollutant emissions from the proposed Project would be less than the SCAQMD thresholds and would not result in a significant impact. Additionally, it may be assumed that the development planned in FEIR 1050 was used in the planning assumptions for the 2007 AQMP, and the Project proposes fewer residences and less traffic generation than anticipated in FEIR 1050. Therefore, the proposed Project would not conflict with the 2007 AQMP. There would be no significant impact and no mitigation is required.

## Construction Emissions – Regional

Construction of the proposed Project is anticipated to start in September 2012, with demolition of approximately 2 acres of asphalt parking area; the asphalt would be pulverized on site and reused for subsequent construction. Demolition would be followed by grading, with cut and fill balanced on site. As discussed previously in Section 1.0, development of the proposed Pacific Gateway Residences Project would no longer involve two levels of subterranean parking, thereby substantially reducing the excavation and export of soil from the Project site. Utilities and foundations would then be installed, followed by construction of the parking structure and residential building. Construction of the Project is proposed to be completed in December 2014.

Criteria pollutant emissions would occur during construction from operation of construction equipment; generation of fugitive dust from grading and earth-moving activities; export of excavated soil; import of construction materials; and operation of vehicles driven to and from the site by construction workers. Project-generated construction emissions were estimated using the California Emission Estimator Model (CalEEMod) Version 2011.1.1 computer program (SCAQMD 2011b). CalEEMod is designed to model construction emissions for land development projects and allows for the input of project- and County-specific information. The CalEEMod model input was based on the construction assumptions described above and in the Project description and on information provided by the project applicant. Where specific information was not known, engineering judgment and default CalEEMod settings and parameters were used. The model inputs include estimated equipment use (e.g., dozers and loaders) for each construction phase and the duration of each phase. The model also includes dust-control measures in accordance with the requirements of SCAQMD Rule 403, Fugitive Dust (see standard conditions and requirements). Table 6 presents the estimated maximum daily emissions for proposed Project construction, and compares the estimated emissions with the SCAQMD daily mass emission thresholds.

**TABLE 6**  
**ESTIMATED MAXIMUM DAILY CONSTRUCTION EMISSIONS**  
**(POUNDS/DAY)**

Year of Construction	VOC	NOx	CO	PM10	PM2.5
2012	8	69	34	6	4
2013	7	36	36	5	3
2014	55	22	27	4	2
<i>SCAQMD Thresholds</i>	<i>75</i>	<i>100</i>	<i>550</i>	<i>150</i>	<i>55</i>
<b>Exceeds Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
VOC: volatile organic compounds; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less. Emissions shown are for winter season; summer emissions would be the same or slightly less. Source: CalEEMod data in Appendix B.					

As shown in Table 6, construction-related emissions generated by the proposed Project would be below the SCAQMD regional thresholds of significance. Therefore, the impact would be less than significant and less than anticipated in FEIR 1050. MM 4.3-1 from FEIR 1050, while not required, would be incorporated into the Project to minimize construction emissions.

## Construction Emissions – Local/Ambient Air Quality

In addition to the mass daily emissions thresholds established by the SCAQMD, short-term local impacts to nearby sensitive receptors from on-site emissions of nitrogen dioxide (NO<sub>2</sub>), carbon

monoxide (CO), PM10, and PM2.5 are examined based on SCAQMD's localized significance thresholds (LST) methodology. Local impacts from construction emissions were not addressed in FEIR 1050 because the SCAQMD established the thresholds and procedures for this type of analysis after the EIR analysis was performed. To assess local air quality impacts for development projects without complex dispersion modeling, the SCAQMD developed screening (lookup) tables to assist lead agencies in evaluating impacts.

For the purposes of an LST analysis, the SCAQMD considers receptors where it is possible that an individual could remain exposed to NO<sub>2</sub> and CO for 1 hour and PM for 24 hours. The lookup tables' emissions limits are based on the AAQS included in Appendix B and the SCAQMD Ambient Air Quality Thresholds shown in Table 5. The closest receptors are the occupants of the 32 condominium residences immediately east of the area to be developed and the employees and patrons of the retail businesses and church adjacent to the site.

Table 7 shows the maximum daily on-site emissions for construction activities compared with the SCAQMD thresholds for local pollutants with receptors at 25 meters (82 feet); the SCAQMD methodology prescribes the use of the 25-meter factor for all receptors within 25 meters. The area of the Project site to be developed is approximately 2.46 acres; the thresholds shown are interpolated from the lookup tables for 2- and 5-acre sites.

**TABLE 7**  
**LOCAL SIGNIFICANCE THRESHOLD CONSTRUCTION EMISSIONS**

	NOx	CO	PM10	PM2.5
	<b>Emissions (lbs/day)</b>			
Construction maximum daily on-site emissions	69	34	5.7	4.4
<i>LST Thresholds (2.5-acre site)</i>	<i>142</i>	<i>1087</i>	<i>8.2</i>	<i>5.7</i>
<b>Exceeds Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
NOx: nitrogen oxides; CO: carbon monoxide; PM10: particulate matter with a diameter of 10 microns or less; PM2.5: particulate matter with a diameter 2.5 microns or less; lbs: pounds; LST: localized significance threshold				
Note: Data is for SCAQMD Source Receptor Area 18, North Coastal Orange County.				
Source: SCAQMD 2009 (thresholds). See Appendix B for CalEEMod model outputs.				

As shown in Table 7, the local emissions from construction of the proposed Project would be less than the thresholds. Therefore, local construction emissions would be less than significant, and mitigation is not required.

#### Long-term Operation

Operational emissions are comprised of area, energy, and mobile (i.e., vehicle) source emissions. The primary source of operational criteria pollutant emissions from the proposed Project, with the exception of volatile organic compounds (VOC), would be vehicles used by Project residents, guests, vendors, and staff. The proposed Project's mobile source emissions are based on the Project-related trip generation forecast, as contained in the Project's traffic impact analysis (Stantec 2012). The primary source of VOC emissions would be an area source (i.e., the consumer products used by residents). Emissions were calculated with the CalEEMod model, discussed above. Estimated peak daily operational emissions are shown in Table 8.

As presented in Table 8, operational emissions generated by the proposed Project would be below the SCAQMD regional thresholds of significance. Therefore, the impact would be less than significant, consistent with the finding in FEIR 1050 for operational regional impacts. No mitigation is required.



The Orange County portion of the South Coast Air Basin is a nonattainment area for ozone (O<sub>3</sub>), NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub>. The proposed Project would generate these pollutants during long-term operations. As shown in Table 8, long-term emissions would be less than 20 percent of the SCAQMD significance thresholds. This magnitude of emissions would not be cumulatively considerable, and the cumulative impact would be less than significant. No mitigation is required.

**TABLE 8  
PEAK DAILY OPERATIONAL EMISSIONS**

Emissions Source	Emissions (lbs/day)				
	VOC	NOx	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
Area sources	6	<0.5	10	<0.5	<0.5
Energy sources	<0.5	<0.5	<0.5	<0.5	<0.5
Mobile sources	4	8	40	9	1
<b>Total Operational Emissions</b>	<b>10</b>	<b>9</b>	<b>50</b>	<b>9</b>	<b>1</b>
<i>SCAQMD Significance Thresholds</i>	55	55	550	150	55
<b>Exceeds Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
lbs/day: pounds per day; VOC: volatile organic compounds; NOx: nitrogen oxides; CO: carbon monoxide; PM <sub>10</sub> : respirable particulate matter with a diameter of 10 microns or less; PM <sub>2.5</sub> : fine particulate matter with a diameter of 2.5 microns or less Totals may not add due to rounding Notes: Emissions are the higher of summer or winter seasons. SOx and lead emissions are not shown; these emissions would be negligible for the Project. CalEEMod model data sheets are included in Appendix B.					

Short-term cumulative impacts related to air quality could occur if Project construction and nearby construction activities were to occur simultaneously. In particular, with respect to local impacts, cumulative construction particulate (i.e., fugitive dust) impacts are considered when projects are located within a few hundred yards of each other. However, as shown in Table 6, construction emissions would be below the SCAQMD regional significance thresholds; particularly, PM emissions would be less than 5 percent of the thresholds. Therefore, construction emissions of nonattainment pollutants would not be cumulatively considerable and Project impacts would be less than significant, consistent with the finding in FEIR 1050 for cumulative impacts. No mitigation is required.

### CO Hotspot

A CO hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. FEIR 1050 calculated future CO concentrations at the intersection of Newport Boulevard and 19<sup>th</sup> Street with the following results:

- The future 2020 1-hour CO concentration would be 6.6 parts per million (ppm) without and with the project. This value is compared with an existing (2003) concentration of 10.6 ppm and the State standard of 20 ppm. The calculation included a forecast background concentration of 5.8 ppm.
- The future 8-hour CO concentration would be 5.3 parts per million (ppm) without and with the project. This value is compared with an existing (2003) concentration of 8.5 ppm and the State standard of 9.0 ppm. The calculation included a forecast background concentration of 3.4 ppm.

As stated in FEIR 1050, “The table (*in FEIR 1050*) shows lower concentrations in the future compared to existing conditions. Although traffic volumes are projected to increase in the future, vehicular pollutant emissions are projected to decrease. In this case, the reduction in emissions dominated the increase in traffic volumes and the pollutant concentrations are projected to be lower in the future.” Ambient CO concentrations have decreased faster than forecast when the FEIR 1050 analysis was prepared. The maximum 2008 and 2009 1-hour CO concentrations measured at the SCAQMD Costa Mesa station were approximately 3 ppm, compared with the 2001 value of 6.2 ppm. The maximum 8-hour concentrations were 2.2 and 2.1 ppm compared with the 2001 value of 4.6 ppm (Table 3.6-1 of FEIR 1050). The recent concentrations are also less than the forecast 2020 concentrations of 5.8 and 3.4 ppm for the 1-hour and 8-hour values used in the FEIR 1050 analysis.

The combination of declining background CO concentrations described above with the fact that total project trip generation would be slightly less than forecast in FEIR 1050, see Section 4.16.2 and Table 10 of this Addendum, results in the conclusion that CO concentrations at Newport Boulevard and 19<sup>th</sup> Street would be less than forecast in FEIR 1050, and the impact would be less than significant, consistent with the findings in FEIR 1050 for local CO impacts. No mitigation is required.

#### Criteria Pollutants from On-Site Construction

Exposure of persons to NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions is discussed above and the local emissions are summarized in Table 7. As discussed, there would be a less than significant impact and no mitigation is required.

#### Toxic Air Contaminant (Diesel PM) Emissions from On-Site Construction

Construction activities would result in short-term, Project-generated emissions of diesel particulate matter (diesel PM) from the exhaust of off-road, heavy-duty diesel equipment used for site preparation (e.g., demolition, excavation, and grading); paving; and building (construction). CARB identified diesel PM as a TAC in 1998. The dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Thus, the risks estimated for a maximally exposed individual (MEI) are higher if a fixed exposure occurs over a longer time period. According to the Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to TAC emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with a Project.

There would be few pieces of off-road, heavy-duty diesel equipment in operation,<sup>3</sup> and the construction period would be short (approximately 28 months) when compared to a 70-year exposure period. When considering these facts combined with the highly dispersive properties of diesel PM and additional reductions in particulate emissions from newer construction equipment (as required by USEPA and CARB regulations), it can be concluded that TAC emissions during construction of the proposed Project would not expose sensitive receptors to substantial emissions of TACs. There would be a less than significant impact and no mitigation is required. This impact was not addressed in FEIR 1050.

Additionally, the proposed Pacific Gateway Residences Project would not generate objectionable odors, which are generally associated with agricultural activities; landfills and

<sup>3</sup> The equipment assumed for the most intense construction phase—three months of excavation and grading—includes 2 scrapers, 1 dozer, 1 grader, and 1 water truck.

materials transfer stations; the generation or treatment of sewage; the use or generation of chemicals; food processing; or other activities that generate unpleasant odors. There would be no impact.

During construction, the proposed Project would operate equipment that may generate odors. Potential construction odors would result from on-site construction equipment's diesel exhaust emissions, roofing, or paving operations. However, these odors would be temporary and would dissipate rapidly from the source with an increase in distance. Construction odors would be considered less than significant. No mitigation is required.

### **Mitigation Program**

FEIR 1050's Mitigation Program includes measures to reduce potential impacts associated with the Plaza Residences Project to less than significant levels. The following measures from FEIR 1050 would also be applicable to the proposed Pacific Gateway Residences Project. Any modifications to the original measures are shown in ~~strike through~~ for deleted text and new, inserted text is underlined.

### ***Standard Conditions and Requirements***

**SC 4.3-1** All construction contractors shall comply with South Coast Air Quality Management District (SCAQMD) regulations, including Rule 403, Fugitive Dust. All grading (regardless of acreage) shall apply best available control measures for fugitive dust in accordance with Rule 403. To ensure that the project is in full compliance with applicable SCAQMD dust regulations and that there is no nuisance impact off the site, the contractor would implement each of the following:

- a. Moisten soil not more than 15 minutes prior to moving soil or conduct whatever watering is necessary to prevent visible dust emissions from exceeding 100 feet in any direction.
- b. Apply chemical stabilizers to disturbed surface areas (completed grading areas) within five days of completing grading or apply dust suppressants or vegetation sufficient to maintain a stabilized surface.
- c. Water excavated soil piles hourly or cover with temporary coverings.
- d. Water exposed surfaces at least twice a day under calm conditions. Water as often as needed on windy days when winds are less than 25 miles per day or during very dry weather in order to maintain a surface crust and prevent the release of visible emissions from the construction site.
- e. Wash mud-covered tires and under-carriages of trucks leaving construction sites.
- f. Provide for street sweeping, as needed, on adjacent roadways to remove dirt dropped by construction vehicles or mud which would otherwise be carried off by trucks departing project sites.
- g. Securely cover loads with a tight fitting tarp on any truck leaving the construction sites to dispose of debris.
- h. Cease grading during periods when winds exceed 25 miles per hour.
- i. Turn equipment off when not in use for more than five minutes.

## **Mitigation Measures**

- MM 4.3-1** During construction activities, the contractor shall implement the following measures to reduce construction equipment emissions.
- a. Maintain construction equipment engines by keeping them tuned.
  - b. Use low sulfur fuel for stationary construction equipment. This is required by SCAQMD Rules 431.1 and 431.2.
  - c. Use existing power sources (i.e., power poles) when feasible. This measure would minimize the use of higher polluting gas or diesel generators.
  - d. Configure construction parking to minimize traffic interference.
  - e. Minimize obstruction of through-traffic lanes. When feasible, construction should be planned so that lane closures on existing streets are kept to a minimum.
  - f. Schedule construction operations affecting traffic for off-peak hours.

## **4.4 BIOLOGICAL RESOURCES**

### **4.4.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW**

FEIR 1050 did not address biological resources. The Initial Study prepared for the EIR found that the Project site is not within the boundaries of a Habitat Conservation Area or an area protected by local ordinance with respect to biological resources. The Project site is developed and is surrounded by an urbanized environment, and it does not contain any jurisdictional wetlands. No impacts were identified relative to biological resources.

### **4.4.2 PROJECT ENVIRONMENTAL REVIEW**

The proposed Project would construct 113 residential units over a 2.46-acre area, thereby completing the final phase of development on the 7.79-acre Project site. The area proposed for development is located within a highly urban area that was previously analyzed and approved for development as part of FEIR 1050, and that does not support any significant biological resources. Based on review of the Project site, conditions on the 2.46-acre portion of the Project site proposed for development have not changed since certification of FEIR 1050; therefore, the previous determination of “no impact” to biological resources is still valid, and implementation of the proposed Project would not create any new impacts to biological resources. Specifically, the proposed Project would not create impacts related to habitat modification; effects on riparian habitat or sensitive natural communities; federally protected wetlands; migratory wildlife corridors; or native wildlife nursery sites. The Project would not conflict with local policies or ordinances protecting biological resources or conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan since no habitat, wetlands, or corridors are present on the Project site or nearby. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects related to biological resources.

The proposed Project would be consistent with the project as analyzed in FEIR 1050. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the proposed Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the Project is undertaken; (3) would bring about no new

information of substantial importance which would (a) create new significant impacts, (b) increase the severity of previously examined effects, (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures which are considerably different from those analyzed in the previous documents. For these reasons, there are no major revisions required to the biological resources analysis provided in FEIR 1050.

## **4.5 CULTURAL/SCIENTIFIC RESOURCES**

### **4.5.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW**

FEIR 1050 did not address cultural resources. The Initial Study prepared for the EIR noted that the Project site is located in an urbanized and developed area of the City of Costa Mesa. The site was currently developed with an office building and asphalt-paved parking area. Built in 1928, the First United Methodist Church is located adjacent to the Project site, outside the southern boundary. According to the Costa Mesa 2000 General Plan, the United Methodist Church appears to meet the standards for listing in the National Register of Historic Places (NRHP). No direct and adverse impacts to this existing church were anticipated as a result of project implementation.

There are no known archaeological or paleontological resources at the Project site. Due to previous development of a portion of the Project site for office use, the potential for the discovery of buried archaeological remains on the site is low. The Project involved the construction of two parking structures. One parking structure serving the attached single-family residences in the northwest area of the site would have two levels of subterranean parking. In conjunction with the overall development of the site, the subterranean parking may uncover archaeological and paleontological resources. Although the probability of recovering cultural resources is expected to be low, mitigation measures would reduce any significant impacts to below a level of significance.

### **4.5.2 PROJECT ENVIRONMENTAL REVIEW**

The area proposed for development is located within a highly urban area that was previously analyzed and approved for development as part of FEIR 1050. Based on review of the Project site, conditions on the 2.46-acre portion of the site proposed for development have not changed since certification of FEIR 1050. Therefore, the previous determination of “less than significant impact with mitigation” related to cultural resources is still valid, and implementation of the proposed Project would not create any new impacts to cultural resources assuming implementation of the mitigation measures from FEIR 1050 identified below. No additional ground disturbance would occur beyond what was evaluated and approved in the previous environmental documents; therefore, the same area would be subject to impacts, and no new impacts related to cultural resources would occur. Similar to the previous analysis, the First United Methodist Church located adjacent to the Project site and outside the southern boundary, appears to meet the standards for listing in the NRHP. No direct or adverse impacts to this existing church are anticipated as a result of Project implementation. As a result, the proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects related to cultural resources.

The proposed Project would be consistent with the Project analyzed in FEIR 1050. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the proposed Project (1) would not propose substantial changes; (2) would not have

circumstantial changes when the Project is undertaken; (3) would bring about no new information of substantial importance which would (a) create new significant impacts, (b) increase the severity of previously examined effects, (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures which are considerably different from those analyzed in the previous documents. For these reasons, there are no major revisions required to the cultural resources analysis provided in EIR 1050.

### **Mitigation Program**

FEIR 1050's Mitigation Program includes measures to reduce potential impacts associated with the Plaza Residences Project to less than significant levels. The following measures from FEIR 1050 would also be applicable to the proposed Pacific Gateway Residences Project. Any modifications to the original measures are shown in ~~strike through~~ for deleted text for new, inserted text is underlined.

### ***Mitigation Measures***

#### **Archaeological Resources**

- MM 4.5-1** An Orange County-certified archaeologist shall be retained at the expense of the Project Applicant to attend pre-grade meetings and to monitor earth-moving activities, including clearing, excavation, and grading of site. The archaeologist shall carefully inspect the property to assess the potential for significant prehistoric or historic remains. If a site or resource is uncovered, then a subsurface evaluation may be needed to assess the resource. Further subsurface investigation may be needed if the site or resource is determined to be unique/important for its prehistoric information.
- MM 4.5-2** During construction activities, the archaeologist shall have the authority to temporarily divert or redirect grading to allow time to evaluate any exposed prehistoric or historic material. In accordance with Public Resources Code 5097.94, if human remains are found, the Orange County coroner must be notified within 24 hours of the discovery. If the coroner determines that the remains are not recent, the coroner will notify the Native American Heritage Commission in Sacramento to determine the most likely descendent for the area. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.
- MM 4.5-3** A final survey and monitoring report, including an itemized inventory and pertinent field data, shall be sent to the property owner and filed with the South Central Coastal Information Center at the University of California, Fullerton.
- MM 4.5-4** Any recovered prehistoric and historic artifacts shall be offered, on a first right-of-refusal basis, to a repository with a retrievable collection system and an educational and research interest in the materials such as the Fowler Museum of Cultural History (UCLA) and California State University, Fullerton.

#### **Paleontological Resources**

- MM 4.5-5** An Orange County-certified paleontologist shall be retained at the expense of the Project Applicant to attend pre-grade meetings to discuss the monitoring,

collecting, and safety procedures for the Project, and shall supervise the monitoring of earthmoving activities, including clearing, excavation, and grading of site. Particular attention shall be paid to areas of the site where excavations below three feet would occur. The paleontologist shall carefully inspect these areas to assess the potential for significant fossil localities. The paleontologist shall tailor the monitoring schedule to the lithologies present, the rate of fossil recovery, the numbers of spreads working simultaneously, and the cubic foot amounts of rock being excavated or disturbed. Monitoring shall occur under the supervision of an Orange County-certified paleontologist.

- MM 4.5-6** The paleontological monitor shall have the authority to temporarily divert or redirect grading to allow time to evaluate any exposed fossil material.
- MM 4.5-7** During monitoring, any scientifically significant specimens shall be properly salvaged after evaluation by, and under the supervision of, the paleontologist. Screening of sediments shall routinely be conducted during monitoring under the supervision of the paleontologist to sample significant small vertebrate remains. During fossil salvage, contextual stratigraphic data shall also be collected. This would include lithologic descriptions, localities plotted on a USGS 7.5' Series topographic quadrangle, photographs, and field notes.
- MM 4.5-8** Specimens shall be prepared to the point of identification, identified, and curated on a long-term loan basis in a suitable repository that has a retrievable storage system. Fees for curation shall be the responsibility of the applicant.
- MM 4.5-9** A final report shall be prepared at the end of earth moving activities, and shall include an itemized inventory of recovered fossils and appropriate stratigraphic and locality data. This report shall be sent to the City of Costa Mesa to signify the end of mitigation. Another copy shall accompany any recovered fossils, along with field logs and photographs, to the designated repository.

## **4.6 GEOLOGY AND SOILS**

### **4.6.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW**

FEIR 1050 concluded that compliance with Uniform Building Code requirements, conditions of approval, and identified mitigation measures would reduce impacts relative to geology and soils to a level considered less than significant. The proposed Project was determined to be consistent with the goals, objectives, and policies of the Costa Mesa 2000 General Plan related to geology. It was determined that development of the Project site would require the implementation of standard City development conditions and mitigation measures to reduce potentially significant impacts to a level considered less than significant. As part of the previous analysis, several loose, sandy soil deposits were found underlying the Project site which, if saturated by a perched water table, would have a low potential to liquefy and settle under conditions such as seismic ground shaking. Proper foundation design would mitigate effects associated with the potential of near surface soil to compress (settle), collapse, and/or liquefy or settle during an earthquake. General guidelines are provided in the Leighton and Associates report (May 2002); it was determined that specific foundation systems and details would be provided as part of the final geotechnical design report. Foundation recommendations would also take into account the potential effects of low expansive soils.

## 4.6.2 PROJECT ENVIRONMENTAL REVIEW

Since the certification of FEIR 1050, two additional geotechnical reports have been prepared by Leighton and Associates (Leighton 2006 and 2011).

Seismic risk at the Project site was comprehensively analyzed as part of the previous environmental documentation and nothing has changed related to local geologic conditions or impacts related seismic hazards. The Project site continues to be located in an area that may be subject to strong ground shaking due to seismic activity anticipated at the site; however, the Project site is not located within an Alquist-Priolo Earthquake Fault Zone (Leighton 2011). Construction on the 1901 Newport Boulevard site has historically occurred in a manner consistent with City and State codes and mitigation measures. All future development associated with the Pacific Gateway Residences Project (the final phase of development on the 1901 Newport Boulevard site) will comply with applicable mitigation measures from FEIR 1050 as detailed below; therefore, impacts related to exposure of people or structures to seismic-related hazards would be the same for the proposed Project. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects.

Consistent with the previous environmental analysis, surface loading and other stresses can cause soils to settle. Consistent with FEIR 1050, because the earth materials underlying the site have relatively low potential to liquefy and settle, estimated settlements would be minimal, causing no significant adverse impacts. However, because the proposed Project would not involve the excavation and export of on-site soils to construct a subterranean parking structure, on-site soils would be subject to remedial removal to provide uniform support and reduce the potential for differential settlement. The proposed Project would also no longer require construction of retaining walls or associated subdrains to support the subterranean parking structure (Leighton 2011). Although no specific impacts were previously identified in FEIR 1050 related to the subterranean parking structure, many of the geotechnical considerations and recommendations identified in the 2002 and 2006 Leighton and Associates reports are no longer required. Further, no new impacts have been identified related to the new Project design without a subterranean parking component.

Due to the nature of the Project and the location of the site within a relatively flat and developed area, the proposed Project is not anticipated to result in substantial erosion or loss of topsoil. Furthermore, construction activities would be performed pursuant to the current National Pollutant Discharge Elimination System (NPDES) permit requirements. No additional ground disturbance beyond what was previously evaluated in FEIR 1050 would occur. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects.

As with the previously analyzed and approved Project, the proposed Project would not involve the use of septic tanks or alternative wastewater disposal systems.

The proposed Project would be consistent with the Project analyzed in FEIR 1050. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the proposed Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the Project is undertaken; (3) would bring about no new information of substantial importance which would (a) create new significant impacts, (b) increase the severity of previously examined effects, (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce



mitigation measures which are considerably different from those analyzed in the previous documents. For these reasons, there are no major revisions required to the geology and soils analysis provided in FEIR 1050.

### **Mitigation Program**

FEIR 1050's Mitigation Program includes measures to reduce potential impacts associated with the Plaza Residences Project to less than significant levels. The following measures from FEIR 1050 would also be applicable to the proposed Pacific Gateway Residences Project. Any modifications to the original measures are shown in ~~strikethrough~~ for deleted text for new, inserted text is underlined.

### ***Standard Conditions and Requirements***

- SC 4.6-1** Compliance with ~~Uniform~~ California Building Code provisions and standard subdivision engineering requirements, as specified in the City's conditions of approval, will satisfactorily address geotechnical issues related to seismic hazards.
- SC 4.6-2** The Plaza Residences development shall be designed to comply with all applicable geological and seismic safety requirements of the ~~Uniform~~ California Building Code and mitigation as defined in the Public Resources Code Section 2693(c). Verification of such compliance will be confirmed during the City's plan review and building permit issuance processes.
- SC 4.6-3** Grading and foundation plans, including foundation loads, shall be reviewed by a registered soils engineer and approved by the City of Costa Mesa Building Safety Division.
- SC 4.6-4** All grading and earthwork shall be performed under the observation of a registered geotechnical engineer and engineering geologist in accordance with the recommendations contained within the Leighton and Associates ~~report~~ reports, dated October 2, 2006 and May 24, 2011, and in accordance with the General Earthwork and Grading Specifications included in the ~~report~~ reports by Leighton and Associates. In order to achieve proper sub-grade preparation, selection of satisfactory materials, and placement and compaction of all structural fill.
- SC 4.6-5** All grading shall be accomplished under the observation and testing of the project geotechnical engineer, the engineering geologist and their representatives.
- SC 4.6-6** Prior to approval of each grading plan by the City of Costa Mesa, the property owner/developer shall submit a soils and geological report for the area to be graded, based on proposed grading and prepared by registered soils engineer and approved by the City of Costa Mesa Building Safety Division.
- SC 4.6-7** Prior to issuance of each building permit by the City of Costa Mesa, the property owner/developer shall submit for review and approval by the City of Costa Mesa Building Safety Division, a detailed foundation design information for the subject building(s), prepared by a registered civil engineer, based on recommendations by a geotechnical engineer.

- SC 4.6-8** Prior to issuance of each building permit by the City of Costa Mesa, the property owner/ developer shall submit plans showing that the proposed structure has been analyzed by a registered civil engineer for earthquake loading and designed according to the most recent seismic standards in the Uniform California Building Code adopted by the City of Costa Mesa.
- SC 4.6-9** Additional geotechnical review of plans shall be performed upon completion of the following: Grading and Precise Grading Plans; Foundation Plans; and Shoring Plans.
- SC 4.6-10** Geotechnical observation and testing shall be conducted during the following stages:
- Upon completion of clearing and grubbing.
  - During all phases of grading, including removals, fill operations, over excavation, temporary slope excavation, and installation of shoring and dewatering systems.
  - During fill placement.
  - When any unusual conditions are encountered.
  - During subdrain construction.
  - ~~During fill placement.~~
  - ~~When any unusual conditions are encountered during grading.~~
- SC 4.6-10** Concrete, in contact with the on-site earth materials, shall be designed in accordance with the negligible category for exposure to sulfate containing solutions of ~~Table 19-A-4 of the 1997~~ Uniform California Building Code.

### ***Mitigation Measures***

- MM 4.6-1** Should dewatering be required for the discharge of perched groundwater during excavation for site improvements, the applicant shall acquire either a National Pollutant Discharge Elimination System (NPDES) permit for the discharge of wastes to surface waters or a Waste Discharge Requirements (WDR) permit for the discharge of wastes to land, as required, from the Santa Ana Regional Water Quality Control Board and provide evidence of permit issuance to the Costa Mesa Building Safety Division prior to initiating any such discharge.

## **4.7 GREENHOUSE GAS EMISSIONS**

### **4.7.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW**

FEIR 1050 did not address greenhouse gas (GHG) emissions.

### **4.7.2 PROJECT ENVIRONMENTAL REVIEW**

The proposed Project was a component of a larger Project that was approved based on previously certified FEIR 1050, which was certified on January 20, 2004. At the time of certification of the FEIR for the Plaza Residences Project, GHG emissions were not part of the required CEQA analysis. Effective March 18, 2010, the State adopted amendments to the State CEQA Guidelines requiring the analysis and mitigation of the effects of GHG emissions in draft

CEQA documents. The State CEQA Guidelines regarding GHG emissions do not specifically address situations involving subsequent implementation actions for a project with a previously certified EIR.

GHG emissions and global climate change is not “new information” since these effects have been generally known for quite some time. Therefore, for this Project, this would not be considered new information under Section 21166 of CEQA, for which a climate change analysis is required. The proposed Project is simply implementing a component of the originally approved Project and would not allow for any new development or uses beyond that previously authorized.

A June 2010 decision by the Fourth District of the California Court of Appeals also instructs and confirms that, after an initial EIR is certified, CEQA establishes a presumption against additional environmental review (*San Diego Navy Broadway Complex Coalition v. City of San Diego*). In that case, the court held that the City of San Diego was not required to prepare a subsequent or supplemental EIR (SEIR) regarding the potential impact of a redevelopment project on global climate change because the City action did not constitute a discretionary approval that would provide it with the authority to address the project’s impact on that environmental issue. Opponents of the project had argued that an SEIR was required to address the project’s GHG emissions because that issue had not been examined in the project’s previously certified EIR.

The court in the Navy Broadway Complex case determined that the key question was whether the City had the remaining authority to shape the project in any way that could respond to the concerns that might be identified in an SEIR (i.e., would it have the authority to require the project proponent to mitigate the environmental damage to some degree). The court ultimately found that the scope of the City’s remaining authority, which was principally related to an aesthetic issue, did not extend to potential impacts on global climate change; that is, the City did not have the authority to modify the project in order to reduce its impact on global climate change.

The circumstances related to the proposed Project are similar to those presented in the Navy Broadway Complex case in that the City has limited discretion with regard to subsequent approvals. Pursuant to the SEIR Regulations, the City of Costa Mesa’s discretion with regard to additional environmental review is limited to determining whether any of the three triggering conditions set forth in the SEIR Regulations have occurred.

Since the first and second conditions have not occurred (i.e., that the Project proponent is not requesting substantial changes to the approved Project and that there have not been substantial changes in circumstances such that new or more severe environmental impacts will occur requiring major revisions to the Plaza Residences FEIR), the issue is simply whether GHG emissions constitute “new information” under the SEIR Regulations. As noted above, a factual finding is made by the City of Costa Mesa that such emissions do not constitute new information. Therefore, no further analysis of this topic is required.

## **4.8 HAZARDS AND HAZARDOUS MATERIALS**

### **4.8.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW**

FEIR 1050 did not address hazardous materials. The Initial Study prepared for the EIR determined that the proposed Project would not be expected to generate hazardous materials; the site has not been historically used for dumping hazardous materials. The existing and historic uses of the proposed Project site would not be expected to result in contamination of the

underlying soils. Additionally, it was determined that the proposed Project site is not located within the vicinity of an airport or a private airstrip, nor is it located within an area susceptible to wildland fires. Proposed actions were determined not to interfere with any known emergency response plan or emergency evacuation plan. No impacts related to this environmental topic were anticipated as a result of Project implementation, and no mitigation measures were identified.

## **4.8.2 PROJECT ENVIRONMENTAL REVIEW**

The proposed Project would construct 113 residential units over a 2.46-acre area, thereby completing the final phase of development on the 7.79-acre 1901 Newport Project site. The area proposed for development is located within the same Project site analyzed and approved for development as part of FEIR 1050. Based on review of the Project site, conditions and uses on the 2.46-acre portion of the site proposed for development have not changed since certification of FEIR 1050. Consistent with the previous findings, the existing and historic uses of the Project site are not expected to result in contamination of the underlying soils. Therefore, the previous determination of “no impact” related to hazards and hazardous materials is still valid, and implementation of the proposed Project would not create any new impacts related to hazards or hazardous materials.

The proposed Project would be consistent with the Project as analyzed in FEIR 1050. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the proposed Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the Project is undertaken; and (3) would bring about no new information of substantial importance which would (a) create new significant impacts, (b) increase the severity of previously examined effects, (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures which are considerably different from those analyzed in the previous documents. For these reasons, there are no major revisions required to the hazards and hazardous materials analysis provided in FEIR 1050.

## **4.9 HYDROLOGY AND WATER QUALITY**

### **4.9.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW**

FEIR 1050 concluded that compliance with the identified standard conditions would reduce water quality impacts to below a level of significance. The Project Applicant would be responsible for obtaining coverage for the Project under the California General Construction Activity Storm Water permit and complying with the requirements of the permit. The existing storm drain system is sufficient to collect proposed on-site flows. No significant impacts related to hydrology were anticipated. Due to a similar amount of impermeable surfaces associated with pre- and post-development conditions, the volume and rate of runoff from the site would remain consistent and was not considered a significant effect. The Project Applicant would file a Notice of Intent with the Regional Water Quality Control Board (RWQCB), Santa Ana Region, demonstrating compliance with the County of Orange Drainage Area Master Plan (DAMP). The Mesa Consolidated Water District prepared a Water System Master Plan in 2000. The Water System Master Plan identifies necessary water supplies during normal, single-dry, and multiple-dry years in its 20-year projection period. The proposed Plaza Residences Project’s water demand could be provided by the Mesa Consolidated Water District and is consistent with the Water District’s Urban Water Management Plan.

According to the Initial Study prepared for EIR 1050, the proposed Project site is located in Flood Zone X, an area determined to be outside a 500-year flood zone (FIRM Map No. 06059C0054F, June 14, 2000). Project site hydrology would not be significantly altered through Project construction. At the time of FEIR 1050 preparation, the proposed Project site existed largely as an impervious surface and, under the proposed actions, was to remain as an impervious surface; therefore, on-site flows remained the same. Under this assumption, it was assumed that the existing storm drain system would be sufficient to collect proposed onsite flows. No impacts related to this environmental topic were anticipated, and no mitigation measures were required.

#### 4.9.2 PROJECT ENVIRONMENTAL REVIEW

The Project area is considered urbanized and would have similar impacts to groundwater and surface hydrology assumed in FEIR 1050. The area proposed for development would be consistent with what was previously assumed for development; therefore, implementation of the proposed Project would not significantly increase impervious surfaces beyond existing conditions. According to the *Conceptual County of Orange/Santa Ana Region Priority Project Waster Quality Management Plan (WQMP)* prepared for the Project by Alliance Land Planning & Engineering, Inc. (Alliance 2011), under existing conditions, the Project site is approximately 85 percent impervious and storm flows enter City storm drain facilities located in Bernard Street and Harbor Boulevard. Development of the proposed Project would reduce impervious surfaces to 80 percent, thereby reducing the volume of storm flows from the Project site. Under 100-year storm conditions, storm water runoff from the project site would be reduced from 10.7 cubic feet per second (cfs) to 8.9 cfs. The proposed drainage system, as analyzed in the previous environmental document, would not be altered with implementation of the proposed Project beyond what was evaluated in FEIR 1050. As part of the Project, storm water would be routed to the existing storm drain facilities, where storm flows would be filtered through one of three bio-filtration basins prior to entering the storm drain. The WQMP identifies applicable structural and non-structural source control best management practices (BMPs) to prevent pollutants from exiting the Project site and impacting receiving waters (Alliance 2011). Continued compliance with identified standard conditions related to national pollutant discharge elimination system (NPDES) permit requirements and best management practices (BMP) would reduce impacts to groundwater, surface hydrology, and water quality to less than significant levels.

Development of the proposed Project in addition to the existing 32-unit condominium development would not exceed the number of units analyzed in FEIR 1050, therefore, the Project would not increase the demand for water supply beyond what was previously identified and evaluated. No additional demand for groundwater supplies to satisfy the demand for domestic water would be needed. No impacts related to groundwater levels would occur. Additionally, due to the presence of perched groundwater, the project would not include infiltration BMPs (Alliance 2011).

As a result, the proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects related to groundwater, surface hydrology, and water quality.

Consistent with the findings of FEIR 1050, the proposed Project site is located within Flood Zone X, which is outside the 100-year and 500-year floodplains (FEMA 2010). Therefore, because the Project site is in the same location, a new significant impact or a substantial increase in the severity of previously identified effects would not be created in relation to the flood hazard area from the proposed Project.

The nearest water bodies are the Upper Newport Bay, located approximately 1.4 miles east of the Project site, and the Santa Ana River Channel, located approximately 2 miles west of the site. Due to the development that exists between these water bodies and the Project site, the potential for inundation by seiche is low and does not represent a significant impact. Additionally, the site is located within a developed area with limited topography and limited exposed soil that would be subject to erosion; therefore, the Project site would not be subject to mudflow. As a result, the proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects.

The proposed Project would be consistent with the Project as analyzed in FEIR 1050. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the proposed Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the Project is undertaken; and (3) would bring about no new information of substantial importance which would (a) create new significant impacts, (b) increase the severity of previously examined effects, (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures which are considerably different from those analyzed in the previous documents. For these reasons, there are no major revisions required to the hydrology and water quality analysis provided in the FEIR 1050.

### **Mitigation Program**

FEIR 1050's Mitigation Program includes measures to reduce potential impacts associated with the Plaza Residences Project to less than significant levels. The following measures from FEIR 1050 would also be applicable to the proposed Pacific Gateway Residences Project. Any modifications to the original measures are shown in ~~striketrough~~ for deleted text for new, inserted text is underlined.

### ***Standard Conditions and Requirements***

- SC 4.9-1** Construction of structural and non-structural BMPs as required by the National Pollutant Discharge Elimination System (NPDES) permit issued to the project site by the County of Orange/City of Costa Mesa to capture urban runoff contaminants from developed areas prior to discharge to on-site storm drain facilities.
- SC 4.9-2** Prior to issuance of a grading permit, the applicant shall develop a Storm Water Pollution Prevention Plan (SWPPP) that contains structural and non-structural BMPs that comply with NPDES Program requirements. BMPs shall be implemented as required by the NPDES Permit issued to the site.
- SC 4.9-3** Prior to issuance of a grading permit, the applicant shall obtain an NPDES Permit from the County of Orange. Applicable BMP provisions shall be incorporated into the NPDES Permit.

## **4.10 LAND USE AND PLANNING**

### **4.10.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW**

The originally approved Project required an amendment to General Plan Land Use Element. The designation of Commercial Center was amended to allow residential uses at a site-specific

density of 40 units per acre and site-specific of 0.70 floor-to-area ratio (FAR). An amendment to the Zoning Code consistent with the proposed General Plan land use designations was also required.

The Project required a site-specific amendment to the Land Use Element to allow for development of the five-level parking structure, which exceeds the allowable four-story limit for sites south of the San Diego Freeway. A minor modification for the 4-foot encroachment of balconies and patio areas into the 20-foot setback along Bernard Street was also required. Development of the Project site with residential uses was determined to be consistent with the redevelopment concept for the Downtown Redevelopment Plan. It was determined that the Project would integrate residential uses with surrounding service and retail development. In order to provide zoning consistent with the proposed General Plan land use designations, the existing provisions of the Planned Development Commercial (PDC) designation were amended to allow the proposed site-specific residential density and FAR. The zoning designation was amended on a site-specific basis to accommodate the proposed high-density residential uses (40 du/ac) and site-specific FAR of 0.70. Therefore, no adverse impacts were anticipated. With the approval of a General Plan Amendment and Zoning Code Amendment, the Project was determined to conform with land use planning documents and programs. FEIR 1050 concluded that the Project would not result in significant land use impacts and no mitigation measures are required.

#### **4.10.2 PROJECT ENVIRONMENTAL REVIEW**

As discussed previously in Section 1.0, the scope of the Pacific Gateway Residences Project is consistent with the concept presented in FEIR 1050, both in terms of land use and development density. FEIR 1050 provides for development of 7.79 acres in the City of Costa Mesa to be developed with the 1901 Newport Plaza office/commercial building; 145 residential condominiums; a 2-level, subterranean parking structure; and a 5-level, above-grade parking structure. Under existing conditions, the 7.79-acre site is partially developed with the 1901 Newport Plaza office/commercial building, 32 condominium units, and the 5-level parking structure. The proposed Pacific Gateway Residences Project would construct the remaining dwelling units as 113 residential units, which would be substantially similar to the residential units analyzed and approved as part of FEIR 1050. Development of a four-story, above-ground parking structure is proposed instead of the previously approved two-level subterranean structure. Although this modification would not constitute a new land use because parking was included as part of the originally proposed Project, the proposed parking structure would now be a visible component of the project. Visual impacts associated with the structure have been previously addressed in Section 4.1, Aesthetics. As discussed, the proposed parking structure would be visually compatible with the adjacent church and other development (existing and proposed) on the 1901 Newport site. Therefore, no land use compatibility impacts would occur. Adherence to the standard condition from FEIR 1050, identified below, would ensure that no new impacts related to land use would occur. The Planning Commission will be the final approval authority for the Master Plan amendment and Addendum to the EIR.

The proposed Project would be consistent with the Project as analyzed in FEIR 1050. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the proposed Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the Project is undertaken; and (3) would bring about no new information of substantial importance which would (a) create new significant impacts, (b) increase the severity of previously examined effects, (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce

mitigation measures which are considerably different from those analyzed in the previous documents. For these reasons, there are no major revisions required to the land use and planning analysis provided in FEIR 1050.

### **Mitigation Program**

FEIR 1050's Mitigation Program includes measures to reduce potential impacts associated with the Plaza Residences Project to less than significant levels. The following measures from FEIR 1050 would also be applicable to the proposed Pacific Gateway Residences Project. Any modifications to the original measures are shown in ~~strikethrough~~ for deleted text for new, inserted text is underlined.

### ***Standard Conditions and Requirements***

**SC 4.10-1** The proposed project would be subject to all applicable regulation of the City's General Plan, zoning ordinance, and all requirements and enhancements of federal, county, and city authorities, and any other governmental entities, and all such requirements and enactments would, by reference, become conditions of project implementation.

## **4.11 MINERAL RESOURCES**

### **4.11.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW**

FEIR 1050 did not address mineral resources. The Initial Study prepared for the EIR identified that the site is not classified as an area with locally important or known mineral resources according to the California Department of Conservation, California Geological Survey (previously Department of Mines and Geology). No impacts related to this environmental topic were anticipated as a result of Project implementation, and no mitigation was required.

### **4.11.2 PROJECT ENVIRONMENTAL REVIEW**

The proposed Project would construct 113 residential units on 2.46 acres, thereby completing the final phase of development on the 7.79-acre 1901 Newport Project site. The area proposed for development is located within the same Project site analyzed and approved for development as part of FEIR 1050. Based on review of the Project site, conditions and uses on the 2.46-acre portion of the site proposed for development have not changed since certification of FEIR 1050; therefore, development of the Pacific Gateway Residences would not result in impacts to mineral resources.

The proposed Project would be consistent with the Project analyzed in FEIR 1050. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the proposed Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the Project is undertaken; and (3) would bring about no new information of substantial importance which would (a) create new significant impacts, (b) increase the severity of previously examined effects, (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures which are considerably different from those analyzed in the previous documents. For these reasons, there are no major revisions required to the mineral resources analysis provided in FEIR 1050.



## 4.12 **NOISE**

### 4.12.1 **SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW**

FEIR 1050 concluded that implementation of standard City requirements and recommended mitigation measures would reduce noise impacts to a level that considered less than significant.

For short periods of time, grading equipment could operate directly across Bernard Street from the residences along the northern property line and generate significant noise levels. Implementation of standard City requirements and recommended mitigation would reduce noise impacts to a level that is considered less than significant.

FEIR 1050 determined that normal operational activities of the Project would not result in noise impacts to off-site land uses.

According to FEIR 1050, two portions of the Project's residential component would be exposed to traffic noise levels in excess of 65 dBA on the Community Noise Equivalent Level (CNEL): adjacent to the corner of Bernard Street at Harbor Boulevard on the northwestern corner of the Project site and on the east side of the site adjacent to the 5-level parking structure.

Further, outdoor living areas south of Bernard Street and across from the Toyota automobile dealership would be exposed to noise levels of approximately 75 dBA from delivery trucks during the nighttime hours. Interior and outdoor living areas adjacent to the parking area located behind the retail center adjacent to Harbor Boulevard would be exposed to outdoor noise levels of 81 dBA and interior noise levels of 58 dBA during nighttime hours.

Implementation of standard City requirements and recommended mitigation would reduce noise impacts to a level that is considered less than significant.

### 4.12.2 **PROJECT ENVIRONMENTAL REVIEW**

#### **Long-term Off-site Impacts: Impacts on Surrounding Land Uses**

**Project Site Activities.** The Project proposes development of residential uses and associated parking facilities. The closest off-site noise-sensitive land uses are the residences northeast of the Project site and the church adjacent to the Project site's southern property line. As stated in FEIR 1050, residential uses typically do not generate noise levels that would adversely affect any nearby noise-sensitive land uses.

The parking structure is proposed adjacent to the off-site First United Methodist Church. Noise sources associated with parking structures can include tire squeal, slamming doors, and engine starts. Because the proposed structure would be limited to residential use, there would be less traffic than in a typical parking structure serving commercial uses. Most activity in the parking structure would occur on weekday mornings and evenings. MM 4.12-1 requires an acoustical study to be approved by the City demonstrating that all feasible sound attenuation measures have been incorporated into the parking structure design. Therefore, noise generated by residential and parking uses on the Project site would not result in a significant noise impact.

**Traffic Noise.** FEIR 1050 demonstrated that the noise increase from Project traffic added to Harbor Boulevard, Newport Boulevard, 19<sup>th</sup> Street, and State Route (SR) 73 would be negligible (i.e. 0.0 to 0.1 dBA). The noise increase would be less than the 3 dBA threshold of significance and would not be audible. There would be no change to that analysis and conclusion for the proposed Project. The impact would be less than significant.

The above analysis shows that the proposed Project would not cause a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project. There would be no new impacts and no additional mitigation is required.

### **Long-Term On-Site Impacts**

As stated in FEIR 1050, the primary source of noise at the Project site is traffic on Harbor Boulevard and, to a lesser degree, Newport Boulevard and 19<sup>th</sup> Street. Additionally, the Toyota dealership and the off-site parking lot of the retail center located west of the site could all generate noise levels that would impact proposed residents. Table 9 identifies noise measurement data from the Project site, taken on January 12, 2012, between 3:00 and 4:30 PM. The average noise level ( $L_{eq}$ ) on the site near Harbor Boulevard was 64 dBA  $L_{eq}$ . The noise level was 55 dBA  $L_{eq}$  adjacent to Bernard Street, approximately 350 feet from Harbor Boulevard and 51 dBA  $L_{eq}$  at the southwestern corner of the Project site. Typically, CNEL noise levels in urban areas are 2 to 3 dBA greater than average daytime noise levels. Therefore, it is estimated that existing noise levels on the Project site near Harbor Boulevard are 66 to 67 dBA CNEL.

**TABLE 9  
NOISE MEASUREMENT DATA**

Site	Location	Time	$L_{eq}$ (dBA)	$L_{min}$ (dBA)	$L_{max}$ (dBA)	Notes
1	Project site: 50 ft south of Bernard St, approx 350 ft east of Harbor Blvd	3:23 PM–3:43 PM	55	46	71	Primary source: Toyota property. 7 cars passed on Bernard St. $L_{max}$ from car horn.
2	Project site: Northwest corner at the Harbor Blvd/ Bernard St intersection, approximately 50 ft east of Harbor Blvd.	3:47PM–4:07 PM	64	52	81	Primary source: Harbor Blvd. $L_{max}$ from bus.
3	Project site: Southwest corner behind strip retail and church	4:10PM–4:30 PM	51	47	59	Noise from strip mall and church bell/clock.
$L_{eq}$ : average noise level; dBA: A-weighted decibels; $L_{min}$ : minimum noise level; $L_{max}$ : maximum noise level.						

The FEIR 1050 noise analysis and FEIR Exhibit 3.7-4 showed that the portion of the Project's residential component adjacent to the corner of Bernard Street at Harbor Boulevard on the northwestern corner of the Project site would be exposed to traffic noise in excess of 65 dBA CNEL, and conventional construction may not provide sufficient noise attenuation to meet interior noise standards. MM 4.12-2 requires an acoustical study to demonstrate that the building design will include noise attenuation that will provide interior noise levels not exceeding 45 dBA CNEL in compliance with Title 24 of the *California Code of Regulations* (also known as the California Building Standards Code) and the City of Costa Mesa Noise Ordinance. It is noted that the residential units in the proposed Project would have air conditioning, which is required by the State code when closed windows are required to meet the interior noise standard.

The FEIR 1050 noise analysis showed that residential units facing Bernard Street and the retail store area west of the site may be subject to noise from truck or car passbys and parking lot noises such as door slams, car alarm activations, and engine startups. These short noise events could exceed the Noise Ordinance maximum noise ( $L_{max}$ ) limits of 70 dBA  $L_{max}$  in the daytime and 55 dBA  $L_{max}$  in the nighttime. However, Section 13-280(d)(1) of the Costa Mesa

Zoning Code states that the exterior noise standards shall not apply to private balconies or patios of a multi-family development, regardless of size. Further, the existing block wall separating the proposed Project site and the existing retail center along Harbor Boulevard would attenuate some of this noise. Therefore, no impact would occur.

Portions of the eastern and northern sides of the proposed parking structure would be located adjacent to proposed residential units. Garage noise has the potential to exceed the State and City interior noise standard. As discussed above, MM 4.12-2 requires an acoustical study to demonstrate that the building design will include noise attenuation to provide interior noise levels that do not exceed 45 dBA CNEL in compliance with the State and City standards.

Title 13, Section 13-280(d) and (e), Exterior Noise Standards, of the Costa Mesa Zoning Code indicates that exterior noise standards shall not apply to “private balconies or patios regardless of size” of multifamily residential development located within the Mixed-Use Overlay District and North Costa Mesa Specific Plan area.

The intent of this exemption is to recognize the outdoor noise environment of mixed-use development with residential uses located adjacent to commercial uses in particular. To promote mixed-use development and acknowledge the unique nature of these uses, this exemption would exclude private balconies or patios as being identified as a noise sensitive area for purposes of noise attenuation. Given that the proposed project is a mixed-use development, the exterior noise standards will not be required for private balconies or patios.

The above analyses and the incorporation of MMs 4.12-1 through 4.12-3 demonstrate that the proposed Project would not cause exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. There would be no new impacts and no additional mitigation is required.

### **Short-term Impacts**

The site preparation phase (which includes excavation and grading) tends to generate the highest noise levels because the noisiest construction equipment is earthmoving equipment. Typical operating cycles for these types of construction equipment may involve 1–2 minutes of full-power operation followed by 3–4 minutes at lower-power settings.

The nearest sensitive receptors are the current residences at Pacifica Condominiums located immediately to the east of the project site. Construction noise is exempt from the City Noise Ordinance if construction occurs during the specified allowable hours. Given compliance with the construction hours specified in the City’s Noise Ordinance, construction noise impacts are considered less than significant.

Construction noise impacts to the existing residences on the north side of Bernard Street would be similar to or less than described in FEIR 1050 because the construction on the Project site closest to those residences has been completed. Further, the completed condominium buildings on the Project site would provide a physical barrier between the proposed Project site and the existing residences along Bernard Street and would attenuate some of the construction noise. Construction noise would not exceed City noise standards because the Project construction would occur between the hours of 7:00 AM and 8:00 PM, and construction during those hours is exempt from the limits of the Noise Ordinance. Additionally, construction of the Project would require the use of heavy construction trucks, which would use local roadways as access to the Project site. However, construction activities related to the proposed Project site would not

generate enough heavy truck traffic to create significant noise increases along the roadways in the Project vicinity. Further, as described in Section 4.16, Transportation and Traffic, heavy truck traffic through residential areas is to be minimized. No significant impacts related to construction traffic noise would occur.

The above analysis demonstrates that the proposed Project would not cause exposure of persons to or generation of noise levels in excess of standards established in the local general plan or Noise Ordinance or applicable standards of other agencies, nor would it cause a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project. There would be no new impacts and no additional mitigation is required.

The proposed Project would be consistent with the Project as analyzed in FEIR 1050. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the proposed Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the Project is undertaken; and (3) would bring about no new information of substantial importance which would (a) create new significant impacts, (b) increase the severity of previously examined effects, (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures which are considerably different from those analyzed in the previous documents. For these reasons, there are no major revisions required to the noise analysis provided in FEIR 1050.

### **Mitigation Program**

FEIR 1050's Mitigation Program includes measures to reduce potential impacts associated with the Plaza Residences Project to less than significant levels. The following measures from FEIR 1050 would also be applicable to the proposed Pacific Gateway Residences Project. Any modifications to the original measures are shown in ~~striketrough~~ for deleted text for new, inserted text is underlined.

### ***Standard Conditions and Requirements***

- SC 4.12-1** The City of Costa Mesa has adopted a Noise Ordinance that excludes control of construction activities during the hours between 7 AM and 8 7 PM Mondays through Fridays, 9:00 AM to 6:00 PM on Saturdays. Construction activities are prohibited on Sunday and federal holidays. All noise generating construction activities ~~within 500 feet of residential areas~~ should be limited to these hours.
- SC 4.12-2** All activities on the project site are required to comply with the City of Costa Mesa Noise Ordinance standards.

### ***Mitigation Measures***

- MM 4.12-1** The Project Applicant shall submit detailed plans for ~~all~~ the parking structures prior to the issuance of a building permit for the residential structures. Said plans shall be accompanied by an acoustical study prepared by a qualified acoustical City-approved expert to the satisfaction of the City of Costa Mesa Planning Division. The acoustical study shall demonstrate that all feasible sound attenuation in compliance with Costa Mesa Municipal Code (Chapter XIII Noise Control) has been incorporated into parking structure design, including but not

limited to brushed driving surfaces (textured), limited openings oriented toward sensitive noise sources, etc.

**MM 4.12-2** Prior to the issuance of building permits for residential development, a detailed interior acoustical engineering study shall be prepared by a qualified acoustical engineer and submitted to the City of Costa Mesa to demonstrate compliance with the City of Costa Mesa and California Code of Regulations Title 24 interior noise requirements. In addition, the acoustical engineering report shall also demonstrate compliance with the Costa Mesa Noise Ordinance interior noise standards for the residences significantly impacted by parking lot noise. Preliminary calculations show that the standards will be achievable with mechanical ventilation to allow windows to remain closed and, potentially, upgraded windows. The acoustical engineering report shall specify any upgrades to the standard construction required to meet such standards. The acoustical engineering study shall be prepared under the supervision of a person experienced in the field of acoustical engineering. The acoustical engineering study including calculations shall be submitted to the City of Costa Mesa prior to the issuance of a building permit. The applicant shall implement the recommendations of the acoustical engineering study into the Project plans prior to the issuance of a building permit.

**MM 4.12-3** Prior to the issuance of precise grading permits for the residential development, a ~~detailed exterior acoustical engineering study shall be prepared by a qualified acoustical engineer and~~ the Applicant shall submitted final project plans to the City of Costa Mesa ~~to determine~~ showing the final heights and locations of noise barriers required to meet the City's noise standards for exterior private residential living areas. ~~Both the City's 65 CNEL exterior noise standard and the Costa Mesa Noise Ordinance (Municipal Code Chapter XIII Noise Control) standards shall be addressed. The 65 CNEL noise standard shall be addressed for exterior residential living areas exposed to noise levels in excess of 65 CNEL as shown in Exhibit 3.7-4. Exhibits 3.7-5 and 3.7-6~~ 12 shows preliminary locations and heights of barriers that will be required to meet the standards based on preliminary calculations, including a minimum 6-foot high patio wall and 5-foot-high balcony enclosures (as applicable) along Bernard Street and Harbor Boulevard. The acoustical engineering study shall finalize these barrier heights and locations based on precise grading and final building plans. To be effective, noise barriers will be required to have a surface density of at least 3.5 pounds per square foot, and have no openings or cracks. They may be a solid wall, an earthen berm, or a combination of the two. They may be constructed of wood studs with stucco exterior, any masonry material, or a material that is less visually intrusive such as 1/4-inch plate glass or 5/8-inch plexiglass. ~~The acoustical engineering study, including calculations,~~ final site plans shall be submitted to the City of Costa Mesa prior to the issuance of a precise grading permit. ~~The applicant shall implement the recommendations of the acoustical engineering study into the project's plans prior to the issuance of a precise grading permit for free standing noise barriers and a building permit for barriers incorporated into the buildings.~~

## **4.13 POPULATION AND HOUSING**

### **4.13.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW**

The Project amended the General Plan and Zoning Code to create a site-specific FAR and density to accommodate a greater density than that currently specified for the area. With implementation of the proposed Project, 161 residential units would be developed on the Project site. Assuming 2.2 persons per household, the Project would generate approximately 355 new residents.<sup>4</sup> This anticipated population growth is not considered to be significant because it represents an incremental increase over current General Plan projections. It would serve to improve the City's job/housing imbalance.

### **4.13.2 PROJECT ENVIRONMENTAL REVIEW**

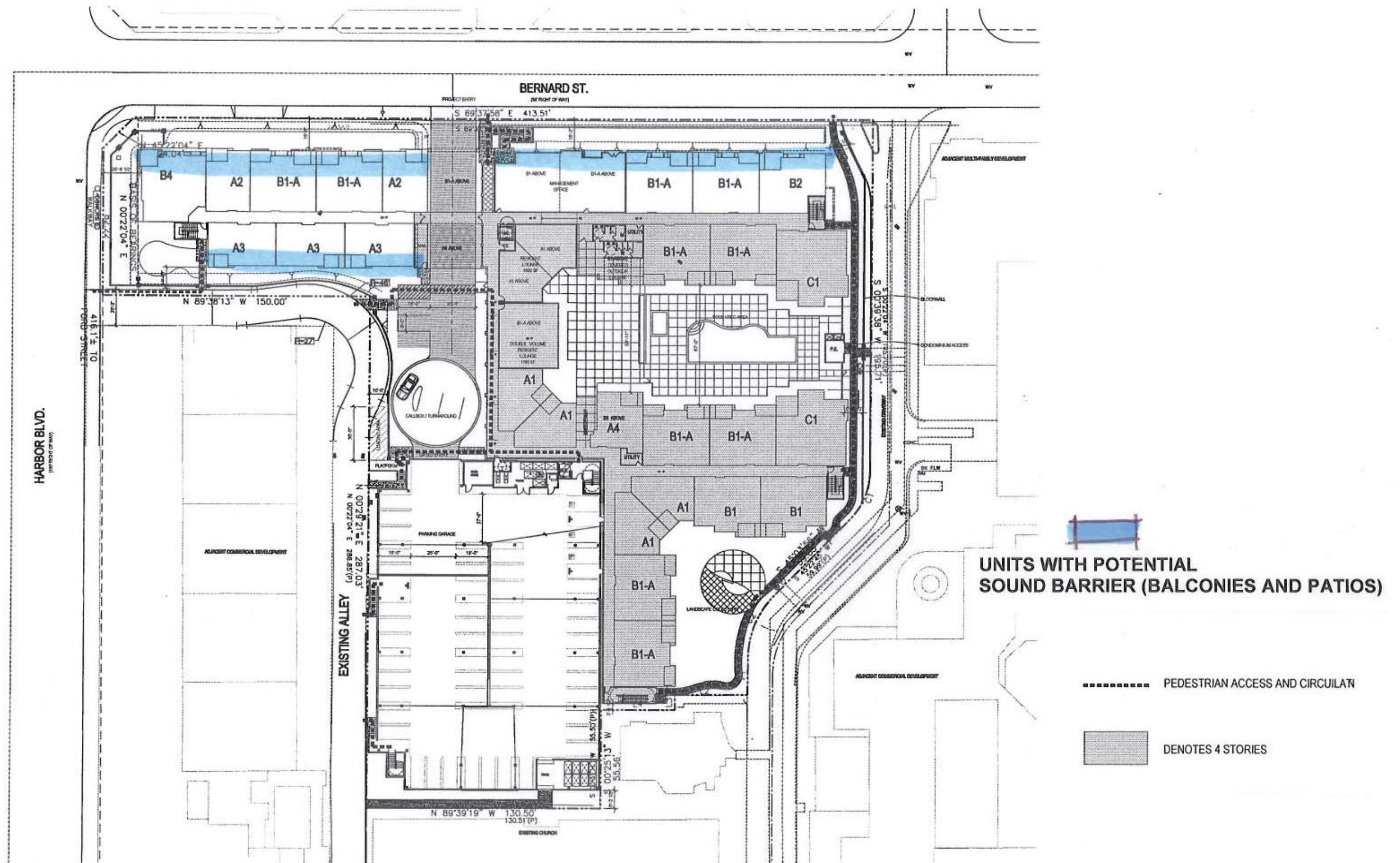
As discussed previously in Section 1.0, the scope of the Pacific Gateway Residences Project is consistent with the concept presented in FEIR 1050, both in terms of land use and development density. FEIR 1050 provides for development of 7.79 acres in the City of Costa Mesa to be developed with the 1901 Newport Plaza office/commercial building; 145 residential condominiums; a 2-level, subterranean parking structure; and a 5-level, above-grade parking structure. Under existing conditions, the 7.79-acre site is partially developed with the 1901 Newport Plaza office/commercial building, 32 condominium units, and the parking structure. The proposed Pacific Gateway Residences Project would construct the remaining dwelling units as 113 residential units, which would be similar to the residential units analyzed and approved as part of FEIR 1050 and would result in the same number of overall dwelling units (145 units). Based on the population figure used for FEIR 1050, the Pacific Gateway Residences Project would generate 249 new residents plus 71 residents generated by the existing Pacific condominiums to the east for a total population increase of 320 residents. This projected population increase would be less than the increase of 355 new residents, as identified in FEIR 1050. Consistent with FEIR 1050 findings, this anticipated population growth is not considered to be significant because it represents an incremental increase over the City's existing population and it serves to improve the City's job/housing imbalance.

The proposed Project would be consistent with the Project analyzed in FEIR 1050. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the proposed Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the Project is undertaken; and (3) would bring about no new information of substantial importance which would (a) create new significant impacts, (b) increase the severity of previously examined effects, (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures which are considerably different from those analyzed in the previous documents. For these reasons, there are no major revisions required to the population and housing analysis provided in FEIR 1050.

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<sup>4</sup> Note that the Project was approved by City Council for development of 145 residential units, reducing the population generation to 319.





## Noise Barrier Locations

Addendum to FEIR 1050



Source: Architects Orange 2011

Exhibit 12

**Bonterra**  
CONSULTING





## **4.14 PUBLIC SERVICES**

### **4.14.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW**

#### **Police Protection**

According to FEIR 1050, the originally approved Project was expected to result in a increased police response to the Project area associated with traffic control and accident investigations, crime investigations, disturbances, and residential burglaries; however, the Costa Mesa Police Department indicated that the Project would not create a significant impact on police services, nor would there be a need to expand existing facilities. This conclusion was based on the assumption that population increases associated with this Project would be no greater than 355 people or an average of 2.2 persons per residence. Implementation of the safety design features and continued coordination with the Police Department would ensure that adequate police protection services could be provided to serve the Project. Effects to the Costa Mesa Police Department were considered less than significant.

#### **Fire Protection**

The Costa Mesa Fire Department anticipated that implementation of the proposed Project would increase the number of emergency responses by an estimated 21 responses per year. This response rate would be similar if the Project site were to be developed with additional office uses. Although the percentage of responses within five minutes could have been potentially be reduced due to the increase in simultaneous responses, the Fire Department determined that this impact was less than significant.

According to FEIR 1050, the City of Costa Mesa Fire Department required that the five-level parking structure be equipped with automatic fire sprinklers to eliminate the need for fire access between the parking structure and the north side of the on-site 1901 Newport Plaza building. The alley on the west side of the Project site (between proposed on-site residences and the existing off-site strip mall) would be wide enough to accommodate the required turning radius for fire apparatus. Implementation of the mitigation program would reduce impacts from the Project to below a level of significance. In addition, new fire hydrants are required to be installed in the alley to access the interior units.

As stated in FEIR 1050, the Project area is served by a water system that has adequate water pressure and volumes to serve the emergency fire protection needs of the Project. It was determined that any necessary improvements to this system would be determined upon submittal of detailed building plans and would be based on building size, relationship to other structures and property lines, and type of building construction.

#### **Schools**

The Project allowed for 145 residential condominiums. It was determined that the Newport-Mesa Unified School District would have sufficient capacity at the school sites for the projected number of students to be generated by the Project. Under existing conditions at the time of FEIR 1050 preparation, the Project would not result in the need to expand existing or construct new school facilities. No significant impacts were expected.

Following the approval of Proposition IA by the voters of the State of California, Senate Bill 50 (SB 50), was fully implemented on November 4, 1998. One of the provisions of SB 50 was the suspension of the Mira-Hart-Murrieta court decisions until January 1, 2006. Under SB 50,

statutory caps have been placed on developer fees, and local governments cannot deny a project based on the adequacy of school facilities. In lieu of the powers granted to the school districts by the Mira-Hart-Murrieta court decisions, SB 50 provides school districts with a reformed statutory school fee collection procedure that, subject to certain conditions, authorizes school districts to collect alternative school fees on residential developments. In order to levy alternative fees, a school district must first approve a one-time School Facilities Needs Analysis, which assesses existing capacity and unhoused students. Documentation for eligibility has been submitted to the Office of Public School Construction. However, none of the identified schools are currently eligible for the SB 50 funding.

#### **4.14.2 PROJECT ENVIRONMENTAL REVIEW**

The proposed Project would involve development of the final phase of the 1901 Newport Project area. Although the classification of proposed uses would be changed from for-sale condominium units to for-lease residential units, the overall density analyzed in FEIR 1050 would be slightly reduced. Therefore, the anticipated demand for public services including police protection, fire protection, and schools would be similar to what was analyzed and approved as part of FEIR 1050. Implementation of the mitigation measures identified below would continue to reduce potential impacts to less than significant levels, and no new impacts would occur. No new significant impacts or substantially worse impacts beyond what was previously identified related to fire protection, police protection and schools would occur.

The proposed Project would be consistent with the Project analyzed in FEIR 1050. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the proposed Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the Project is undertaken; (3) would bring about no new information of substantial importance which would (a) create new significant impacts, (b) increase the severity of previously examined effects, (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures which are considerably different from those analyzed in the previous documents. For these reasons, there are no major revisions required to the public services analysis provided in FEIR 1050.

#### **Mitigation Program**

FEIR 1050's Mitigation Program includes measures to reduce potential impacts associated with the Plaza Residences Project to less than significant levels. The following measures from FEIR 1050 would also be applicable to the proposed Pacific Gateway Residences Project. Any modifications to the original measures are shown in ~~striketrough~~ for deleted text for new, inserted text is underlined.

#### ***Standard Conditions and Requirements***

**SC 4.14-1** Vehicular access must be provided and maintained serviceable throughout construction to all required fire hydrants. Additional fire hydrants must be provided in the alley serving the interior units subject to approval by Fire Prevention Division.

**SC 4.14-2** The ~~five-level~~ parking structure must be equipped with automatic fire sprinklers.

- SC 4.14-3** Prior to issuance of a building permit, the project applicant shall pay developer fees to the Newport-Mesa Unified School District pursuant to the requirements established in SB 50. The amount of fees to be paid will be determined based on the established State formula for determining construction costs.

### ***Mitigation Measures***

- MM 4.14-1** Prior to the initiation of grading, a construction security service shall be established at the construction site. Initially, the service shall ensure that no unauthorized entry is made into the construction area. For the duration of each phase of construction, the Project Applicant shall provide sufficient on-site security personnel on a 24-hour, seven days a week basis, to patrol all areas of construction and prohibit unauthorized entry. Evidence of compliance with this requirement is subject to periodic site inspections by City staff.

## **4.15 RECREATION**

### **4.15.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW**

Based on the City of Costa Mesa's park dedication standard of 4.26 acres of parkland per 1,000 population, the residential component of the Project was projected to generate the need for 1.5 acres of parkland based on a population of 355 residents (2.2 persons per residence). It was determined that, if the Plaza Residences site were to be subdivided, the Project Applicant would be required to comply with this policy. This obligation could have been met through the dedication of land within the City of Costa Mesa, the payment of in-lieu fees, or a combination of land and fees. Compliance with this obligation would have precluded significant impacts.

### **4.15.2 PROJECT ENVIRONMENTAL REVIEW**

As discussed previously, the proposed Project would involve development of the final phase of the 1901 Newport Project area. Although the classification of proposed uses would be changed from for-sale condominium units to for-lease residential units, the overall density analyzed in FEIR 1050 would be slightly reduced. The City's park dedication standard continues to be 4.26 acres per 1,000 population. Therefore, based on a comparable population to what was previously approved, the anticipated demand for recreation uses, parklands, and park facilities would be similar to what was analyzed and approved as part of FEIR 1050. Implementation of the Mitigation Measures identified below would continue to reduce potential impacts to less than significant levels, and no new impacts would occur. No new significant impacts or substantially worse impacts beyond what was previously identified related to recreational uses would occur.

The proposed Project would be consistent with the Project analyzed in FEIR 1050. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the proposed Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the Project is undertaken; (3) would bring about no new information of substantial importance which would (a) create new significant impacts, (b) increase the severity of previously examined effects, (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures which are considerably different from those analyzed in the previous documents. For these reasons, there are no major revisions required to the recreation resources analysis provided in FEIR 1050. The condominium map has been recorded and all

applicable park fees submitted with the first phase of development. No mitigation measures are required.

## 4.16 TRANSPORTATION AND TRAFFIC

### 4.16.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW

According to EIR 1050, the Plaza Residences Project would result in a significant impact at the intersection of Newport Boulevard at 19<sup>th</sup> Street by increasing the intersection level of service (LOS) to LOS F. Implementation of mitigation, which was completed as part of the previous development phase associated with the Pacifica at Newport Plaza condominium units, would reduce this impact to a less than significant level. It was determined that the Project would not interfere with alternative, non-vehicular transportation, including public transit, bikeways, and pedestrian access. Existing facilities would continue to serve the Project area, and the provision of internal walkways and sidewalks would provide additional opportunity for pedestrian circulation.

### 4.16.2 PROJECT ENVIRONMENTAL REVIEW

The following analysis is based on the *Pacific Gateway Apartment Conversion Traffic Impact Comparison*, prepared by Stantec Consulting Services Inc. (Stantec 2012).

The Project consists of 113 residential units located on the south side of Bernard Street east of Harbor Boulevard. The Project site was previously approved for a total of 145 condominium units, of which 32 units have been built. The Project is currently proposing to construct the remaining 113 units as for-lease residential units instead of the originally approved residential condominiums project. The original traffic analysis prepared to support FEIR 1050 applied the Costa Mesa Traffic Model (CMTM) High Density Residential trip rates to the condominium Project. The same CMTM High Density Residential trip rates would have been applied if the originally approved Project had been apartments or condominiums, and the resulting trip generation would have been the same. In comparison, application of the most recent Institute of Transportation Engineers (ITE) Trip Generation (8<sup>th</sup> Edition) Apartment trip rates to the currently proposed 113 for-lease residential units results in a decrease of 3 trips in the AM peak hour and a decrease of 4 trips in the PM peak hour, with a total daily decrease of 23 trips (refer to Table 10).

**TABLE 10**  
**TRIP GENERATION AND TRIP RATE SUMMARY**

Land Use	Amount	AM Peak Hour			PM Peak Hour			ADT
		In	Out	Total	In	Out	Total	
Trip Generation								
Approved – High Density Residential	113 du	10	50	60	49	25	74	774
Proposed – For-Lease Residential	113 du	11	46	57	45	25	70	751
Trip Rates								
High Density Residential <sup>a</sup>	113 du	0.09	0.44	0.53	0.43	0.22	0.65	6.85
Apartment <sup>b</sup>	113 du	0.10	0.41	0.51	0.40	0.22	0.62	6.65
ADT: average daily traffic; du: dwelling units								
<sup>a</sup> Costa Mesa Traffic Model (CMTM) High Density Residential rate (blend of ITE rates 210, 220 & 231)								
<sup>b</sup> Institute of Transportation Engineers (ITE) Apartment rate (220), Trip Generation (8 <sup>th</sup> Edition, 2008)								
Source: Stantec 2012								

The difference between the assumptions in the original traffic analysis and the current analysis is a very minor change in the access and the distribution of Project traffic to Bernard Street. The original traffic analysis assumed a connection to 19<sup>th</sup> Street, which is no longer available to the proposed Project because of the new project access on Bernard Street. Fewer than 20 inbound or outbound trips were assigned to this connection during the peak hours in the original study; however, the use of this access was minimal since the intersection with 19<sup>th</sup> Street was limited to right turns only. The trip generation and the overall distribution are virtually unchanged from the original study.

Access to the proposed residential units would be provided by a single driveway on Bernard Street east of Harbor Boulevard as shown on Exhibit 5. The total driveway volume is estimated to be 57 AM peak hour trips (11 inbound, 46 outbound), 70 PM peak hour trips (45 inbound, 25 outbound), and 751 daily trips. Approximately 75 percent of the trips are estimated to travel on Bernard Street to/from Harbor Boulevard, and approximately 25 percent are estimated to travel on Parsons Street (see Figure 1 in Attachment C). The driveway is slightly offset to the west from the existing Toyota dealership service department driveway, creating a potential conflict between left turns into and out of the car dealership driveway and the Project driveway. However, the expected traffic volumes from the proposed Project are low enough not to create a significant problem on this low volume, low speed street. For example, during the AM peak hour, approximately 35 vehicles are estimated to exit the Project driveway via a northbound left turn toward the west. This is an average of approximately one vehicle every two minutes. The PM peak hour left-turn volume is estimated to be even lower, approximately 20 vehicles (i.e., one vehicle every three minutes). Inbound Project trips from Parsons Street entering via a left turn from westbound Bernard Street are estimated to be fewer than 10 trips during the AM or PM peak hour. These low volumes are not expected to create a significant conflict with vehicles entering and exiting the car dealership driveway.

In conclusion, the trip generation, distribution, and impacts from the proposed Project have not significantly changed from the originally approved Project analyzed in 2002. The conclusions from the original analysis are still valid, and the Project is not expected to have a significant impact on the circulation system. Further, the Project has already complied with all identified traffic mitigation as set forth in FEIR 1050, including payment of all traffic impact fees and contribution toward improvements at the intersection of Newport Boulevard at 19<sup>th</sup> Street. Therefore, no mitigation for the proposed Project is required.

Consistent with the conditions of approval placed on the originally approved Project, a condition of approval is applicable to the proposed Project related to a traffic signal at the intersection of Bernard Street at Harbor Boulevard. Specifically, the need for the traffic signal at the intersection of Bernard Street at Harbor Boulevard would be verified following Project buildout and installed only when warrants based on actual counts are met. The Project Applicant has been conditioned to a deposit equal to full cost of traffic signal installation (based on residential component's contribution). The need for a traffic signal would be evaluated every year following full occupancy of the Project for a period of five years. If the need for a signal is verified, it will be installed using the money deposited. If a signal is not warranted in five years, the deposit will be returned to the Project Applicant. As discussed previously, a four-level parking structure serving residents of the proposed Pacific Gateway residential buildings would be constructed. The parking structure would have 283 parking spaces, including 242 parking spaces for residents and 41 parking spaces for guests, and would meet the City parking code requirement through the provision of 283 parking spaces and can adequately serve the proposed Project. No new impact would occur related to parking.

Additionally, the Project site would continue to be served by non-vehicular transportation options, including a transit stop located along Harbor Boulevard, bikeways, pedestrian walkways, which would be incorporated into the proposed Project. The Project would support these alternative modes of transportation by introducing a new population to the Project area that can take advantage of these options.

The proposed Project would be consistent with the Project analyzed in FEIR 1050. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the proposed Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the Project is undertaken; (3) would bring about no new information of substantial importance which would (a) create new significant impacts, (b) increase the severity of previously examined effects, (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures which are considerably different from those analyzed in the previous documents. For these reasons, there are no major revisions required to the transportation and traffic resources analysis provided in FEIR 1050.

#### **4.17 UTILITIES AND SERVICE SYSTEMS**

##### **4.17.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW**

###### **Water**

According to FEIR 1050, the proposed Project would require approximately 511 gallons of potable water per day. It was determined that the proposed Plaza Residences Project's water demand could be provided by the Mesa Consolidated Water District and would be consistent with the Water District's Urban Water Management Plan. According to FEIR 1050, distribution pipeline stub-outs were identified in the Project area that would accommodate most of the new demand; additional water service lines from the distribution system would also be added, if needed. No significant impacts to potable water supplies were identified.

###### **Sewer**

A sewer capacity study was performed by Hunsaker & Associates to determine available capacity to serve the Project, as well as existing, planned, and foreseeable future development within the sewer study area. Based on a generation factor of 85 gallons per day per capita (161 residences x 2.5 persons per unit [worst-case]), the proposed Project was projected to generate 34,213 gallons per day of sewer flow.<sup>5</sup> As a part of the Project evaluated in FEIR 1050, the Applicant proposed to redirect sewer flows from the proposed residential development to the sewer system in Newport Boulevard (instead of using Bernard Street). The Project would connect to the Costa Mesa Sanitation District sewer system in Newport Boulevard, north of 19<sup>th</sup> Street. Based on estimated sewer flows, the gravity sewer reach between 20<sup>th</sup> Street and Bay Street would have marginally exceeded design capacity with the addition of the proposed Project. Project flows represent an approximate 9.6 percent increase when compared to existing measured flows. However, field measurements indicated that flows in this reach at that time were approximately 20.6 percent less than calculated sewer flows (design capacity flows). It was determined that capacity is available to serve the Project. No significant impacts were identified.

<sup>5</sup> Note that the Project was approved by City Council for development of 145 residential units, which would subsequently reduce the projected sewer flow.

## **Solid Waste**

Based on solid waste generation factors provided by the California Integrated Waste Management Board, FEIR 1050 found that the residential portion of the proposed Project was projected to generate 118 tons of solid waste annually. The County of Orange Integrated Waste Management Department (IWMD)<sup>6</sup> indicated that adequate capacity is available for the Project. No significant impacts to solid waste service would result with implementation of the proposed Project.

## **Electricity**

According to FEIR 1050, electricity loads of the proposed Project fall within the parameters of Southern California Edison's (SCE's) projected load growth in the Project area. The estimated electrical demand for the Project was projected at 0.9 million kilowatt hours per year (kWh/year). SCE is required to provide service to the Project site, and coordination is typical between a Project Applicant and SCE to avoid any notable service disruptions during extension, relocation, and upgrading of services and facilities. This coordination ensures that the nature, design, and timing of electrical system improvements are adequate to serve the Project and are in compliance with California energy conservation requirements as specified in *California Code of Regulations* (Titles 24 and 25). It was determined that implementation of the Project would not result in a significant impact on electrical services or facilities.

## **Natural Gas**

According to FEIR 1050, the Southern California Gas Company identified that gas service to the Project could be served without any significant impact on the environment. It was determined that any gas facility additions for the expansion would be completed in accordance with the company's policies and extension rules on file with the California Public Utilities Commission at the time contractual arrangements were made.

### **4.17.2 PROJECT ENVIRONMENTAL REVIEW**

The proposed Project would develop the Project site with land uses similar to those previously evaluated; the overall number and type of residential units proposed would not exceed what was previously evaluated. Therefore, the demand on utility systems, including water, wastewater, solid waste, electricity, and natural gas, would be substantially similar to what was analyzed and approved as part of FEIR 1050. The Project would continue to be served by Mesa Consolidated Water District for water services, Costa Mesa Sanitation District for wastewater services, the County of Orange for solid waste disposal services, SCE for electricity, and the Southern California Gas Company for natural gas. Therefore, the proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects related to utilities.

The proposed Project would be consistent with the Project analyzed in FEIR 1050. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the proposed Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the Project is undertaken; and (3) would bring about no new information of substantial importance which would (a) create new significant impacts, (b) increase the severity of previously examined effects, (c) determine that mitigation measures

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<sup>6</sup> The Orange County IWMD has since been renamed to OC Waste & Recycling.

or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures which are considerably different from those analyzed in the previous documents. For these reasons, there are no major revisions required to the utilities and services systems analysis provided in FEIR 1050.

### **Mitigation Program**

FEIR 1050's Mitigation Program includes measures to reduce potential impacts associated with the Plaza Residences Project to less than significant levels. The following measures from FEIR 1050 would also be applicable to the proposed Pacific Gateway Residences Project. Any modifications to the original measures are shown in ~~striketrough~~ for deleted text for new, inserted text is underlined.

### ***Standard Conditions and Requirements***

- SC 4.17-1** Mesa Consolidated's Water Efficiency Specialist shall be consulted with during landscape planning to ensure that appropriate water conservation measures are used.
- SC 4.17-2** Prior to the issuance of building permits, the project applicant shall pay the applicable connection fees charged to new development by the Mesa Consolidated Water District.
- SC 4.17-3** Water conservation measures, as required by the State of California, shall be incorporated into building plans for the project. These may include, but are not limited to, the following:
- Health and Safety Code Section 17921.3 which requires low-flush toilets and urinals in all new construction;
  - Title 24, California Administrative Code Sections 2-5352(l) and (j) which require insulation of water-heating systems and pipe insulation to reduce water used before hot water reaches equipment or fixtures; and,
  - Government Code Section 7800 which specifies that lavatories in all public facilities be equipped with self-closing faucets.
- SC 4.17-4** Prior to issuance of building permits, a letter shall be obtained from the Costa Mesa Sanitary District verifying that there is sufficient capacity in the receiving trunk lines to serve the project.
- SC 4.17-5** Prior to the issuance of a connection permit(s), the applicant shall pay the applicable connection fees.
- SC 4.17-6** Prior to the recordation of the final Master Plan, the applicant shall provide to the City of Costa Mesa a letter from both the Southern California Edison Company and the Southern California Gas Company indicating their ability to provide service to the project.
- SC 4.17-7** Structures on the site shall be required to meet the Energy Building Regulations adopted by the California Energy Commission (Title 24). Meeting these specifications would conserve non-renewable natural resources to levels acceptable to the State.



- SC 4.17-8** The applicant shall comply with guidelines provided by Southern California Edison Company with respect to easement restrictions, construction guidelines, and potential amendments to right-of-way in the areas of any existing Southern California Edison Company easements.
- SC 4.17-9** The applicant shall implement the following measures on the residential portions of the project to reduce energy consumption:
1. Energy Star labeled appliances, water heaters, air conditioners, windows, etc.
  2. Low-e insulated glass reduces heat gain due to solar radiation for windows
  3. Programmable thermostats
  4. HVAC Duct Sealing
  5. Increased insulation

***Mitigation Measures***

- MM 4.17-1** All sewer flows originating from the residential portion of the Project site shall be connected to the Costa Mesa Sanitary District's sewer system at Manhole No. 4 in Newport Boulevard.
- MM 4.17-2** In accordance with the requirements of AB 939, construction contractors shall reuse construction forms where practicable or applicable, attempt to balance soils on the site, minimize over cutting of lumber and polyvinyl chloride (PVC) piping where feasible, and reuse landscape containers to the extent feasible.
- MM 4.17-3** Recycling bins for glass, metals, paper, wood, plastic, green waste, and cardboard shall be placed on the construction sites for use by construction workers.
- MM 4.17-4** In construction specifications and bid packages, require building materials made of recycled materials, to the extent feasible and economically practical.
- MM 4.17-5** Prior to the initiation of demolition and construction activities, the Project Applicant shall prepare a waste reduction plan for acceptance by the City of Costa Mesa. The waste reduction plan shall be included in all construction bid packages. During the term of the demolition and construction, the goal is to recycle or divert 50 percent of construction and demolition wastes and keep records thereof in tonnage or in other measures deemed acceptable to the City of Costa Mesa. To the maximum extent feasible, on-site separation of scrap wood and clean green waste shall occur to permit chipping and mulching for soil enhancement of land cover purposes.

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## **SECTION 5.0 CONCLUSIONS**

Based on the analysis provided in this Addendum, there is sufficient evidence in the record to determine that (1) the proposed Project does not represent a substantial change from the Project evaluated in FEIR 1050; (2) there are no substantial changes with respect to the circumstances under which the Project is undertaken; and (3) there is no new information of substantial importance, which was not known and could not have been known at the time FEIR 1050 was certified as complete. The Pacific Gateway Residences Project would not have any new or substantially more severe impacts than what was evaluated FEIR 1050. There are no new mitigation measures that were not adopted at the time the FEIR was certified that would further reduce the Project impacts. FEIR 1050, when considered in conjunction with this Addendum, provides adequate documentation pursuant to the CEQA For the Pacific Gateway Residences Project.

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## **SECTION 6.0 REFERENCES**

California Department of Conservation, Division of Land Resources Protection. 2010. Farmland Mapping and Monitoring Program (FMMP) Farmland Map: Orange County, California. Sacramento: FMMP.

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Sacramento Metropolitan Air Quality Management District (SMAQMD). 2011 (May). CEQA Guide to Air Quality Assessment. Sacramento, CA: SMAQMD. <http://www.airquality.org/ceqa/ceqaguideupdate.shtml>.

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## **APPENDIX A**

### **MITIGATION MONITORING AND REPORTING PROGRAM**







MITIGATION MONITORING PROGRAM FOR  
THE ADDENDUM TO THE PLAZA RESIDENCES  
FINAL ENVIRONMENTAL IMPACT REPORT  
NO. 1050

PACIFIC GATEWAY RESIDENCES PROJECT  
(STATE CLEARINGHOUSE NO. 2002061128)

Prepared for

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## **SECTION 1.0 INTRODUCTION**

Section 21081.6 to the State of California Public Resources Code requires a Lead or Responsible Agency that approves or carries out a project where an environmental impact report (EIR) has identified significant environmental effects to adopt a "reporting or monitoring program for adopted or required changes to mitigate or avoid significant environmental effects." The Addendum to Final EIR 1050 (FEIR 1050) includes all applicable mitigation measures from FEIR 1050. The City of Costa Mesa, Development Services Department was the Lead Agency for Final EIR 1050 and is the lead agency for the Addendum to FEIR 1050 and, therefore, is responsible for implementation of the mitigation monitoring program. The Addendum to FEIR 1050 has been prepared for the Pacific Gateway Residences project which addressed the potential environmental impacts and, where appropriate, recommended measures to mitigate these impacts. As such, a mitigation measure reporting and monitoring program is required for the Addendum to FEIR 1050 to ensure that all relevant mitigation measures that have been adopted are implemented.

Section 2 describes the roles of responsible parties in implementing and monitoring the adopted mitigation measures, and generally describes the program procedures.

Table 1 in Section 3 includes the list of mitigation measures and identifies the timing of the implementation or verification of each measure, the method of verification, and the party responsible for verifying that the measure is complete. The City and/or project applicant are responsible for the implementation of each measure, and the City representative is responsible for verifying that the measure has been satisfactorily completed, and/or written evidence submitted to the City, which verifies that the measure has been satisfactorily completed.

## **SECTION 2.0 PROJECT MANAGEMENT**

### **2.1 RESPONSIBILITIES**

The mitigation monitoring program (MMP) for the Pacific Gateway Residential project will be in place through construction of the project or until all mitigation measures are implemented. The City of Costa Mesa Development Services Department is the Lead Agency for the project. If required, the City will be responsible for designating another responsible agency to take responsibility for implementation of portions of the MMP, if and when appropriate.

The primary City of Costa Mesa personnel responsible for verifying compliance with the mitigation measures listed within Section 3, is the Development Services Department including having the primary role of coordinating the compliance verifications of all other parties. These parties, or designated assignees, are responsible for ensuring that the mitigation measures are completed, and are vested with the authority to act accordingly.

### **2.2 GENERAL PROCEDURES**

The Planning and Redevelopment Manager, Development Services Department, or designated assignee will be responsible for the overall management of the MMP. Assignments of responsibility are included in Section 3.

The above-noted designated "monitor" shall oversee elements of the MMP and review compliance through the use of procedures developed by the Planning and Redevelopment

Manager, Development Services Department. The designated monitor shall ensure compliance with the adopted mitigation measure and ensure proper action is taken on each measure. If it is found that an adopted mitigation measure is not being properly implemented, the Planning and Redevelopment Manager, Development Services Department shall require corrective actions to ensure adequate implementation.

### **SECTION 3.0**

#### **MITIGATION MONITORING PROGRAM TABLE**

**TABLE 1**  
**PLAZA RESIDENCES MITIGATION MONITORING PROGRAM**

EIR Section/Mitigation Program	Timing of Mitigation	Responsible Party(ies)	Funding Sources
<b>Air Quality</b>			
<b>Standard Conditions and Requirements</b>			
<p><b>SC 4.3-1</b> All construction contractors shall comply with South Coast Air Quality Management District (SCAQMD) regulations, including Rule 403, Fugitive Dust. All grading (regardless of acreage) shall apply best available control measures for fugitive dust in accordance with Rule 403. To ensure that the project is in full compliance with applicable SCAQMD dust regulations and that there is no nuisance impact off the site, the contractor would implement each of the following:</p> <ul style="list-style-type: none"> <li>a. Moisten soil not more than 15 minutes prior to moving soil or conduct whatever watering is necessary to prevent visible dust emissions from exceeding 100 feet in any direction.</li> <li>b. Apply chemical stabilizers to disturbed surface areas (completed grading areas) within five days of completing grading or apply dust suppressants or vegetation sufficient to maintain a stabilized surface.</li> <li>c. Water excavated soil piles hourly or cover with temporary coverings.</li> <li>d. Water exposed surfaces at least twice a day under calm conditions. Water as often as needed on windy days when winds are less than 25 miles per day or during very dry weather in order to maintain a surface crust and prevent the release of visible emissions from the construction site.</li> <li>e. Wash mud-covered tired and under-carriages of trucks leaving construction sites.</li> <li>f. Provide for street sweeping, as needed, on adjacent roadways to remove dirt dropped by construction vehicles or mud which would otherwise be carried off by trucks departing project sites.</li> <li>g. Securely cover loads with a tight fitting tarp on any truck leaving the construction sites to dispose of debris.</li> <li>h. Cease grading during period when winds exceed 25 miles per hour.</li> <li>i. Turn equipment off when not in use for more than five minutes.</li> </ul>	During grading and construction activities; inspection during grading and construction	Project applicant; Costa Mesa Building Safety Division	Project applicant
<b>Mitigation Measures</b>			
<p><b>MM 4.3-1</b> During construction activities, the contractor shall implement the following measures to reduce construction equipment emissions.</p> <ul style="list-style-type: none"> <li>a. Maintain construction equipment engines by keeping them tuned.</li> <li>b. Use low sulfur fuel for stationary construction equipment. This is required by SCAQMD Rules 431.1 and 431.2.</li> <li>c. Use existing power sources (i.e., power poles) when feasible. This measure would minimize the use of higher polluting gas or diesel generators.</li> <li>d. Configure construction parking to minimize traffic interference.</li> </ul>	Prior to grading permit issuance	Project applicant, Costa Mesa Planning Division	Project applicant



**TABLE 1**  
**PLAZA RESIDENCES MITIGATION MONITORING PROGRAM**  
**(CONTINUED)**

EIR Section/Mitigation Program	Timing of Mitigation	Responsible Party(ies)	Funding Sources
<p>e. Minimize obstruction of through-traffic lanes. When feasible, construction should be planned so that lane closures on existing streets are kept to a minimum.</p> <p>f. Schedule construction operations affecting traffic for off-peak hours.</p> <p>g. Develop a traffic plan to minimize traffic flow interference from construction activities (the plan may include advance public notice of routing, use of public transportation and satellite parking areas with a shuttle service).</p>			
<b>3.4 Cultural Resources</b>			
<b>Mitigation Measures</b>			
<b>MM 4.5-1</b> An Orange County-certified archaeologist shall be retained at the expense of the Project Applicant to attend pre-grade meetings and to monitor earth moving activities, including clearing, excavation, and grading of site. The archaeologist shall carefully inspect the property to assess the potential for significant prehistoric or historic remains. If a site or resource is uncovered, then a subsurface evaluation may be needed to assess the resource. Further subsurface investigation may be needed if the site or resource is determined to be unique/important for its prehistoric information.	Final Master Plan review; prior to building permit issuance	Costa Mesa Planning Division	Project applicant
<b>MM 4.5-2</b> During construction activities, the archaeologist shall have the authority to temporarily divert or redirect grading to allow time to evaluate any exposed prehistoric or historic material. In accordance with Public Resources Code 5097.94, if human remains are found, the Orange County coroner must be notified within 24 hours of the discovery. If the coroner determines that the remains are not recent, the coroner will notify the Native American Heritage Commission in Sacramento to determine the most likely descendent for the area. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.	Final Master Plan review; prior to building permit issuance	Costa Mesa Planning Division	Project applicant
<b>MM 4.5-3</b> A final survey and monitoring report, including an itemized inventory and pertinent field data, shall be sent to the property owner and filed with the South Central Coastal Information Center at the University of California, Fullerton.	Final Master Plan review; prior to building permit issuance	Costa Mesa Building Safety Division	Permit fees
<b>MM 4.5-4</b> Any recovered prehistoric and historic artifacts shall be offered, on a first right of refusal basis, to a repository with a retrievable collection system and an educational and research interest in the materials such as the Fowler Museum of Cultural History (UCLA) and California State University, Fullerton.	Prior to building permit issuance	Costa Mesa Planning Division	Permit fees; Project applicant

**TABLE 1**  
**PLAZA RESIDENCES MITIGATION MONITORING PROGRAM**  
**(CONTINUED)**

EIR Section/Mitigation Program	Timing of Mitigation	Responsible Party(ies)	Funding Sources
<b>MM 4.5-5</b> An Orange County-certified paleontologist shall be retained at the expense of the Project Applicant to attend pre-grade meetings to discuss the monitoring, collecting, and safety procedures for the Project, and shall supervise the monitoring of earthmoving activities, including clearing, excavation, and grading of site. Particular attention shall be paid to areas of the site where excavations below three feet would occur. The paleontologist shall carefully inspect these areas to assess the potential for significant fossil localities. The paleontologist shall tailor the monitoring schedule to the lithologies present, the rate of fossil recovery, the numbers of spreads working simultaneously, and the cubic foot amounts of rock being excavated or disturbed. Monitoring shall occur under the supervision of an Orange County-certified paleontologist.	During pre-grade meetings	Costa Mesa Planning Division	Project applicant
<b>MM 4.5-6</b> The paleontological monitor shall have the authority to temporarily divert or redirect grading to allow time to evaluate any exposed fossil material.	During earth-moving activities	Costa Mesa Planning Division	Project applicant
<b>MM 4.5-7</b> During monitoring, any scientifically significant specimens shall be properly salvaged after evaluation by, and under the supervision of, the paleontologist. Screening of sediments shall routinely be conducted during monitoring under the supervision of the paleontologist to sample significant small vertebrate remains. During fossil salvage, contextual stratigraphic data shall also be collected. This would include lithologic descriptions, localities plotted on a USGS 7.5' Series topographic quadrangle, photographs, and field notes.	During earth-moving activities	Costa Mesa Planning Division	Project applicant
<b>MM 4.5-8</b> Specimens shall be prepared to the point of identification, identified, and curated on a long-term loan basis in a suitable repository that has a retrievable storage system. Fees for curation shall be the responsibility of the applicant.	After completion of earth-moving activities	Costa Mesa Planning Division	Project applicant
<b>MM 4.5-9</b> A final report shall be prepared at the end of earth moving activities, and shall include an itemized inventory of recovered fossils and appropriate stratigraphic and locality data. This report shall be sent to the City of Costa Mesa to signify the end of mitigation. Another copy shall accompany any recovered fossils, along with field logs and photographs, to the designated repository.	After completion of earth-moving activities	Costa Mesa Planning Division	Project applicant
<b>Geology and Soils</b>			
<b>Standard Conditions and Requirements</b>			
<b>SC 4.6-1</b> Compliance with <u>Uniform California</u> Building Code provisions and standard subdivision engineering requirements, as specified in the City's conditions of approval will satisfactorily address geotechnical issues related to seismic hazards.	Final Master Plan review; prior to building permit issuance	Costa Mesa Building Safety Division	Permit fees
<b>SC 4.6-2</b> The Plaza Residences development shall be designed to comply with all applicable geological and seismic safety requirements of the <u>Uniform California</u> Building Code and mitigation as defined in the Public Resources Code Section 2693(c). Verification of such compliance will be confirmed during the City's plan review and building permit issuance processes.	Final Master Plan review; prior to building permit issuance	Costa Mesa Building Safety Division	Permit fees
<b>SC 4.6-3</b> Grading and foundation plans, including foundation loads, shall be reviewed by a registered soils engineer, and approved by the City of Costa Mesa Building Safety Division.	Prior to grading permit issuance	Registered soils engineer; Costa Mesa Building Safety Division	Permit fees

**TABLE 1  
PLAZA RESIDENCES MITIGATION MONITORING PROGRAM  
(CONTINUED)**

<b>EIR Section/Mitigation Program</b>	<b>Timing of Mitigation</b>	<b>Responsible Party(ies)</b>	<b>Funding Sources</b>
<b>SC 4.6-4</b> All grading and earthwork shall be performed under the observation of a registered geotechnical engineer and engineering geologist in accordance with the recommendations contained within the Leighton and Associates reports, <u>dated October 2, 2006 and May 24, 2011</u> , and in accordance with the General Earthwork and Grading Specifications included in the reports by Leighton and Associates.	Inspection during grading	Registered geotechnical engineer; Costa Mesa Building Safety Division	Project applicant
<b>SC 4.6-5</b> All grading shall be accomplished under the observation and testing of the project geotechnical engineer, the engineering geologist and their representatives.	Inspection during grading	Registered geotechnical engineer, Costa Mesa Building Safety Division	Project applicant
<b>SC 4.6-6</b> Prior to approval of each grading plan by the City of Costa Mesa, the property owner/developer shall submit a soils and geological report for the area to be graded, based on proposed grading and prepared by registered soils engineer and approved by the City of Costa Mesa Building Safety Division.	Prior to grading permit issuance	Project applicant; Costa Mesa Building Safety Division	Permit fees
<b>SC 4.6-7</b> Prior to issuance of each building permit by the City of Costa Mesa, the property owner/developer shall submit for review and approval by the City of Costa Mesa Building Safety Division, a detailed foundation design information for the subject building(s), prepared by a registered civil engineer, based on recommendations by a geotechnical engineer.	Prior to building permit issuance	Project applicant/ registered civil engineer; Costa Mesa Building Safety Division	Permit fees
<b>SC 4.6-8</b> Prior to issuance of each building permit by the City of Costa Mesa, the property owner/developer shall submit plans showing that the proposed structure has been analyzed by a registered civil engineer for earthquake loading and designed according to the most recent standards in the <u>Uniform California</u> Building Code adopted by the City of Costa Mesa.	Prior to building permit issuance	Project applicant/ registered civil engineer; Costa Mesa Building Safety Division	Permit fees
<b>SC 4.6-9</b> Additional geotechnical review of plans shall be performed upon completion of the following: Grading and Precise Grading Plans; Foundation Plans; and Shoring Plans.	Prior to building permit issuance	Project applicant/ registered civil engineer; Costa Mesa Building Safety Division	Permit fees
<b>SC 4.6-10</b> Geotechnical observation and testing shall be conducted during the following stages: <ul style="list-style-type: none"> <li>– Upon completion of clearing and grubbing.</li> <li>– During all phases of grading, including removals, fill operations, over excavation, temporary slope excavation, and installation of shoring and dewatering systems.</li> <li>– During fill placement.</li> <li>– When any unusual conditions are encountered.</li> <li><del>– During fill placement.</del></li> <li><del>– When any unusual conditions are encountered during grading.</del></li> </ul>	Prior to building permit issuance	Project applicant/ registered civil engineer; Costa Mesa Building Safety Division	Permit fees
<b>SC 4.6-11</b> Concrete, in contact with the on-site earth materials, shall be designed in accordance with the negligible category for exposure to sulfate containing solutions of Table 19-A-4 of the 1997 Uniform Building Code.	Prior to building permit issuance	Project applicant/ registered civil engineer, Costa Mesa Building Safety Division	Permit fees

**TABLE 1  
PLAZA RESIDENCES MITIGATION MONITORING PROGRAM  
(CONTINUED)**

EIR Section/Mitigation Program	Timing of Mitigation	Responsible Party(ies)	Funding Sources
<b>Mitigation Measures</b>			
<b>MM 4.6-1</b> Should dewatering be required for the discharge of perched groundwater during excavation for site improvements, the applicant shall acquire either a National Pollutant Discharge Elimination System (NPDES) permit for the discharge of wastes to surface waters or a Waste Discharge Requirements (WDR) permit for the discharge of wastes to land, as required, from the Santa Ana Regional Water Quality Control Board and provide evidence of permit issuance to the Costa Mesa Building Safety Division prior to initiating any such discharge.	Prior to discharge of perched groundwater during grading and construction	Regional Water Quality Control Board; project applicant; Costa Mesa Building Safety Division	Permit fees
<b>Hydrology and Water Quality</b>			
<b>Standard Conditions of Approval</b>			
<b>SC 4.9-1</b> Construction of structural BMPs as required by the NPDES Stormwater Permit issued to the project site by the County of Orange/City of Costa Mesa to capture urban runoff contaminants from developed areas prior to discharge to on-site storm drain facilities.	Obtain NPDES permit; construct during grading and site development	Costa Mesa Planning Division; Costa Mesa Building Safety Division	Permit fees; Project applicant
<b>SC 4.9-2</b> Prior to issuance of a grading permit, the applicant shall develop a Storm Water Pollution Prevention Plan (SWPPP) that contains structural and non-structural BMPs that comply with NPDES Program requirements. BMPs shall be implemented as required by the NPDES Permit issued to the site.	Obtain NPDES permit; construct during grading and site development	Costa Mesa Planning Division; Costa Mesa Building Safety Division	Permit fees; Project applicant
<b>SC 4.9-3</b> Prior to issuance of a grading permit, the applicant shall obtain an NPDES Permit from the County of Orange. Applicable BMP provisions shall be incorporated into the NPDES Permit.	Obtain NPDES permit; construct during grading and site development	Costa Mesa Planning Division; Costa Mesa Building Safety Division	Permit fees; Project applicant
<b>Land Use and Planning Programs</b>			
<b>Standard Conditions and Requirements</b>			
<b>SC 4.10-1</b> The proposed project would be subject to all applicable regulations of the City's General Plan, zoning ordinance, and all requirements and enactments of Federal, County, City authorities, and any other governmental entities, and all such requirements and enactments would, by reference, become conditions of project implementation.	Final Master Plan review; prior to building permit issuance	Costa Mesa Planning Division	Permit fees
<b>Noise</b>			
<b>Standard Conditions and Requirements</b>			
<b>SC 4.12-1</b> The City of Costa Mesa has adopted a Noise Ordinance that excludes control of construction activities during the hours between 7 a.m. and 7 p.m. <u>Mondays through Fridays, 9:00 AM to 6:00 PM on Saturdays. Construction activities are prohibited on Sunday and federal holidays.</u> All noise generating construction activities <del>within 500 feet of residential areas</del> should be limited to these hours.	Inspection during grading and construction activities	Costa Mesa Planning Division	Project applicant

**TABLE 1  
PLAZA RESIDENCES MITIGATION MONITORING PROGRAM  
(CONTINUED)**

EIR Section/Mitigation Program	Timing of Mitigation	Responsible Party(ies)	Funding Sources
<b>SC 4.12-2</b> All long-term activities on the project site are required to comply with the City of Costa Mesa Noise Ordinance standards.	Prior to grading permit issuance	Project applicant; Costa Mesa Building Safety Division	Project applicant
<b>Mitigation Measures</b>			
<b>MM 4.12-1</b> The Project Applicant shall submit detailed plans for <u>all the</u> parking structures prior to the issuance of a building permit for the <u>residential</u> structures. Said plans shall be accompanied by an acoustical study prepared by a qualified acoustical City-approved expert to the satisfaction of the City of Costa Mesa Planning Division. The acoustical study shall demonstrate that all feasible sound attenuation in compliance with Costa Mesa Municipal Code (Chapter XIII Noise Control) has been incorporated into parking structure design, including but not limited to brushed driving surfaces (textured), limited openings oriented toward sensitive noise sources, etc.	Prior to the issuance of grading permits	Acoustical engineer, project applicant, Costa Mesa Planning Division	Project applicant
<b>MM 4.12-2</b> The project applicant shall submit detailed plans for all parking structures prior to the issuance of a grading or building permit for the structure. Said plans shall be accompanied by a acoustical study prepared by a City-approved acoustical expert to the satisfaction of the Costa Mesa Planning Division. The acoustical study shall demonstrate that all feasible sound attenuation in compliance with the City's Noise Ordinance has been incorporated into parking structure design, including but not limited to brushed driving surfaces (textured), limited openings oriented toward sensitive noise sources, etc.	Prior to issuance of grading or building permit for a parking structure	Acoustical engineer; project applicant; Costa Mesa Planning Division	Project applicant
<b>MM 4.12-3</b> Prior to the issuance of precise grading permits for the residential development, <del>a detailed exterior acoustical engineering study shall be prepared by a qualified acoustical engineer and the Applicant shall submitted final project plans</del> to the City of Costa Mesa <del>to determine showing</del> the final heights and locations of noise barriers required to meet the City's noise standards for exterior private residential living areas. <del>Both the City's 65 CNEL exterior noise standard and the Costa Mesa Noise Ordinance (Municipal Code Chapter XIII Noise Control) standards shall be addressed. The 65 CNEL noise standard shall be addressed for exterior residential living areas exposed to noise levels in excess of 65 CNEL as shown in Exhibit 3.7-4. Exhibits 3.7-5 and 3.7-6 12 shows preliminary locations and heights of barriers that will be required to meet the standards based on preliminary calculations, including a minimum 6-foot high patio wall and 5-foot-high balcony enclosures (as applicable) along Bernard Street and Harbor Boulevard. The acoustical engineering study shall finalize these barrier heights and locations based on precise grading and final building plans.</del> To be effective, noise barriers will be required to have a surface density of at least 3.5 pounds per square foot, and have no openings or cracks. They may be a solid wall, an earthen berm, or a combination of the two. They may be constructed of wood studs with stucco exterior, any masonry material, or a material that is less visually intrusive such as 1/4-inch plate glass or 5/8-inch plexiglass. <del>The acoustical engineering study, including calculations, final site plans shall be submitted to the City of Costa Mesa prior to the issuance of a precise grading permit. The applicant shall implement the recommendations of the acoustical engineering study into the project's plans prior to the issuance of a precise grading permit for free standing noise barriers and a building permit for barriers incorporated into the buildings.</del>	Prior to issuance of precise grading permits for the residential development	Project Applicant; Costa Mesa Planning Division	Project applicant

**TABLE 1  
PLAZA RESIDENCES MITIGATION MONITORING PROGRAM  
(CONTINUED)**

EIR Section/Mitigation Program	Timing of Mitigation	Responsible Party(ies)	Funding Sources
<b>Public Services</b>			
<b>Standard Conditions and Requirements</b>			
<b>SC 4.14-1</b> Vehicular access must be provided and maintained serviceable throughout construction to all required fire hydrants. <u>Additional fire hydrants must be provided in the alley serving the interior units subject to approval by Fire Prevention Division.</u>	Part of Master Plan submittal	Project applicant; Costa Mesa Fire Department; Costa Mesa Transportation Services Division	Permit fees
<b>SC 4.14-2</b> The <u>five-level</u> parking structure must be equipped with automatic fire sprinklers.	Site inspection; Prior to certificate of occupancy issuance	Project applicant; Costa Mesa Fire Department; Costa Mesa Transportation Services Division	Permit fees
<b>SC 4.14-3</b> Prior to issuance of a building permit, the project applicant shall pay developer fees to the Newport-Mesa Unified School District pursuant to the requirements established in SB 50. The amount of fees to be paid will be determined based on the established State formula for determining construction costs.	Prior to building permit issuance	Project applicant; Costa Mesa Planning Division	School fees
<b>Mitigation Measures</b>			
<b>MM 4.14-1</b> Prior to the initiation of grading, a construction security service shall be established at the construction site. Initially, the service shall ensure that no unauthorized entry is made into the construction area. For the duration of each phase of construction, the project applicant shall provide sufficient on-site security personnel on a 24-hour, 7 days per week basis, to patrol all areas of construction and prohibit unauthorized entry. Evidence of compliance with this requirements is subject to periodic site inspections by City staff.	Prior to grading permit issuance; site inspection	Project applicant; Costa Mesa Police Department	Project applicant
<b>Utilities and Service Systems</b>			
<b>Standard Conditions and Requirements</b>			
<b>SC 4.17-1</b> Mesa Consolidated's Water Efficiency Specialist shall be consulted with during landscape planning to ensure that appropriate water conservation measures are used.	Prior to building permit issuance	Project applicant, Water District	Fees
<b>SC 4.17-2</b> Prior to the issuance of building permits, the project applicant shall pay the applicable connection fees charged to new development by the Mesa Consolidated Water District.	Prior to building permit issuance	Project applicant; Water District	Fees
<b>SC 4.17-3</b> Water conservation measures, as required by the State of California, shall be incorporated into building plans for the project. These may include, but are not limited to, the following: <ul style="list-style-type: none"> <li>Health and Safety Code Section 17921.3 which requires low-flush toilets and urinals in all new construction;</li> <li>Title 24, California Administrative Code Sections 2-5352(I) and (j) which require insulation of water-heating systems and pipe insulation to reduce water used before hot water reaches</li> </ul>	Prior to building permit issuance; prior to certificate of occupancy issuance	Project applicant; Costa Mesa Building Safety Division	Project applicant

**TABLE 1**  
**PLAZA RESIDENCES MITIGATION MONITORING PROGRAM**  
**(CONTINUED)**

EIR Section/Mitigation Program	Timing of Mitigation	Responsible Party(ies)	Funding Sources
equipment or fixtures; and, – Government Code Section 7800 which specifies that lavatories in all public facilities be equipped with self-closing faucets.			
<b>SC 4.17-4</b> Prior to issuance of building permits, a letter shall be obtained from the Costa Mesa Sanitary District and the Orange County Sanitation District verifying that there is sufficient capacity in the receiving trunk lines to serve the project.	Prior to building permit issuance	Costa Mesa Sanitary District, Orange County Sanitation Districts, and project applicant	Project applicant
<b>SC 4.17-5</b> Prior to the issuance of a connection permit(s), the applicant shall pay the applicable connection fees.	Prior to connection permits issuance	Costa Mesa Sanitary District, Orange County Sanitation Districts, and project applicant	Fees
<b>SC 4.17-6</b> Prior to the recordation of a final Master Plan, the applicant shall provide to the City of Costa Mesa, a letter from Southern California Edison Company and Southern California Gas Company indicating their ability to provide service to the project.	Prior to recordation of final Master Plan	Project applicant; Edison Company; Southern California Gas Company; Costa Mesa Planning Division	Project applicant
<b>SC 4.17-7</b> Structures on the site shall be required to meet the Energy Building Regulations adopted by the California Energy Commission (Title 24). Meeting these specifications would conserve non-renewable natural resources to levels acceptable to the State.	Prior to building permit and certificate of occupancy issuance	Project applicant; Costa Mesa Planning Division	Permit fees; Project applicant
<b>SC 4.17-8</b> The applicant shall comply with guidelines provided by Southern California Edison Company with respect to easement restrictions, construction guidelines, and potential amendments to right-of-way in the areas of any existing Southern California Edison Company easements.	Prior to recordation of final Master Plan	Project applicant; Southern California Edison; Southern California Gas Company; Costa Mesa Planning Division	Project applicant
<b>Mitigation Measures</b>			
<b>MM 4.17-1</b> All sewer flows originating from the residential portion of the project site shall be connected to the Costa Mesa Sanitary District's sewer system at Manhole No. 4 in Newport Boulevard.	Prior to connection permits issuance	Costa Mesa Sanitary District, Orange County Sanitation District, and project applicant	Fees
<b>MM 4.17-2</b> In accordance with the requirements of AB 939, construction contractors shall reuse construction forms where practicable or applicable, attempt to balance soils on the site, minimize over cutting of lumber and polyvinyl chloride (PVC) piping where feasible, and reuse landscape containers to the extent feasible.	Ongoing during construction; inspection during construction	Project applicant; Costa Mesa Building Safety Division	Project applicant

**TABLE 1**  
**PLAZA RESIDENCES MITIGATION MONITORING PROGRAM**  
**(CONTINUED)**

<b>EIR Section/Mitigation Program</b>	<b>Timing of Mitigation</b>	<b>Responsible Party(ies)</b>	<b>Funding Sources</b>
<b>MM 4.17-3</b> Recycling bins for glass, metals, paper, wood, plastic, green waste, and cardboard shall be placed on the construction sites for use by construction workers.	Ongoing during construction; inspection during construction	Project applicant; Costa Mesa Building Safety Division	Project applicant
<b>MM 4.17-4</b> In construction specifications and bid packages, require building materials made of recycled materials, to the extent feasible and economically practical.	During grading and construction; inspections	Project applicant; Costa Mesa Building Safety Division	Project applicant
<b>MM 4.17-5</b> Prior to the initiation of demolition and construction activities, the Project Applicant shall prepare a waste reduction plan for acceptance by the City of Costa Mesa. The waste reduction plan shall be included in all construction bud packages. During the term of the demolition and construction, the goal is to recycle or divert 50 percent of construction and demolition wastes and keep records thereof in tonnage or in other measures deemed acceptable to the City of Costa Mesa. To the maximum extent feasible, on-site separation of scrap wood and clean green waste shall occur to permit chipping and mulching for soil enhancement of land cover purposes.	Prior to initiation of demolition and construction activities	Project applicant; Costa Mesa Building Safety Division	Project Applicant



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**APPENDIX B**  
**AIR QUALITY CALCULATIONS**



## CALIFORNIA AND NATIONAL AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards	Federal Standards	
			Primary <sup>a</sup>	Secondary <sup>b</sup>
O <sub>3</sub>	1 Hour	0.09 ppm (180 µg/m <sup>3</sup> )	–	–
	8 Hour	0.070 ppm (137 µg/m <sup>3</sup> )	0.075 ppm (147 µg/m <sup>3</sup> )	Same as Primary
PM10	24 Hour	50 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>	Same as Primary
	AAM	20 µg/m <sup>3</sup>	–	Same as Primary
PM2.5	24 Hour	–	35 µg/m <sup>3</sup>	Same as Primary
	AAM	12 µg/m <sup>3</sup>	15.0 µg/m <sup>3</sup>	Same as Primary
CO	1 Hour	20 ppm (23 mg/m <sup>3</sup> )	35 ppm (40 mg/m <sup>3</sup> )	–
	8 Hour	9.0 ppm (10 mg/m <sup>3</sup> )	9 ppm (10 mg/m <sup>3</sup> )	–
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m <sup>3</sup> )	–	–
NO <sub>2</sub>	AAM	0.030 ppm (57 µg/m <sup>3</sup> )	0.053 ppm (100 µg/m <sup>3</sup> )	Same as Primary
	1 Hour	0.18 ppm (339 µg/m <sup>3</sup> )	0.100 ppm (188 µg/m <sup>3</sup> )	–
SO <sub>2</sub>	24 Hour	0.04 ppm (105 µg/m <sup>3</sup> )	–	–
	3 Hour	–	–	0.5 ppm (1,300 µg/m <sup>3</sup> )
	1 Hour	0.25 ppm (655 µg/m <sup>3</sup> )	0.075 ppm (196 µg/m <sup>3</sup> )	–
Lead	30-day Avg.	1.5 µg/m <sup>3</sup>	–	–
	Calendar Quarter	–	1.5 µg/m <sup>3</sup>	Same as Primary
	Rolling 3-month Avg.	–	0.15 µg/m <sup>3</sup>	
Visibility Reducing Particles	8 hour	Extinction coefficient of 0.23 per km – visibility ≥ 10 miles ( 0.07 per km – ≥30 miles for Lake Tahoe)	No Federal Standards	
Sulfates	24 Hour	25 µg/m <sup>3</sup>		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m <sup>3</sup> )		
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m <sup>3</sup> )		

O<sub>3</sub>: ozone; ppm – parts per million; µg/m<sup>3</sup> – micrograms per cubic meter; PM10: large particulate matter; AAM: Annual Arithmetic Mean; PM2.5: fine particulate matter; CO: carbon monoxide; mg/m<sup>3</sup>: milligrams per cubic meter; NO<sub>2</sub>: nitrogen dioxide; SO<sub>2</sub>: sulfur dioxide; km: kilometer.

–: No Standard ;: milligrams per cubic meter

<sup>a</sup> National Primary Standards: The levels of air quality necessary, within an adequate margin of safety, to protect the public health.

<sup>b</sup> National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

Note: More detailed information in the data presented in this table can be found at the CARB website ([www.arb.ca.gov](http://www.arb.ca.gov)).

Source: CARB 2010

**Pacific Gateway Project - Costa Mesa**  
**Orange County, Winter**

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric
Parking Structure	283	Space
Apartments Mid Rise	113	Dwelling Unit

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	Utility Company	Southern California Edison
Climate Zone	8	2.2		
		Precipitation Freq (Days)		

### 1.3 User Entered Comments

30

Project Characteristics - Operational end of December 2014; use 2015

Land Use - Per project description, garage area 105,832 sf

Acreage 1.8 for res; 0.69 for garage for 2.49 total

Construction Phase - Demo 9/4-30/2012; grad 10/1-12/31/2012; util 1/1-2/28/2013

Build 3/1/2013-10/30/2014; pave 4/15-19/2013; paint 9/15-12/15/2014

Off-road Equipment -

Off-road Equipment - Bldg - no crane or generator

Off-road Equipment - Demo- Pulverizer (dozer is surrogate), loader

Off-road Equipment - Grade-2 scraper, dozer, grader

Off-road Equipment - Pave 1 paver, 1, roller, 1 loader

Off-road Equipment - Util- 1 excavator, 1 loader, 6hr/day

Trips and VMT - No demo hauling; asphalt reused on site

Demolition -

Grading - grade 2.49 acre; no export or import

Vehicle Trips - Weekday trip rate 6.65 per traffic study

Woodstoves - No fireplaces

Construction Off-road Equipment Mitigation -

**Highlight** indicates data used for LST analysis

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2012	7.97	68.74	34.29	0.06	6.22	2.94	9.16	3.32	2.94	6.26			0.00	0.72	0.00	7,086.15
2013	7.30	36.02	35.54	0.06	2.36	2.68	5.04	0.10	2.68	2.78			0.00	0.65	0.00	5,540.06
2014	55.42	21.71	26.76	0.05	2.59	1.47	4.06	0.11	1.47	1.57			0.00	0.44	0.00	4,469.59
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2012	7.97	68.74	34.29	0.06	2.88	2.94	5.82	1.50	2.94	4.44			0.00	0.72	0.00	7,086.15
2013	7.30	36.02	35.54	0.06	2.36	2.68	5.04	0.10	2.68	2.78			0.00	0.65	0.00	5,540.06
2014	55.42	21.71	26.76	0.05	2.59	1.47	4.06	0.11	1.47	1.57			0.00	0.44	0.00	4,469.59
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

## 2.2 Overall Operational

### Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.55	0.11	9.61	0.00		0.00	0.05		0.00	0.05				0.02	0.00	17.36
Energy	0.04	0.34	0.15	0.00		0.00	0.03		0.00	0.03				0.01	0.01	438.75
Mobile	4.29	8.23	39.39	0.07	8.91	0.36	9.28	0.30	0.36	0.66				0.29		7,192.51
Total	9.88	8.68	49.15	0.07	8.91	0.36	9.36	0.30	0.36	0.74				0.32	0.01	7,648.62

### Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.55	0.11	9.61	0.00		0.00	0.05		0.00	0.05				0.02	0.00	17.36
Energy	0.04	0.34	0.15	0.00		0.00	0.03		0.00	0.03				0.01	0.01	438.75
Mobile	4.29	8.23	39.39	0.07	8.91	0.36	9.28	0.30	0.36	0.66				0.29		7,192.51
Total	9.88	8.68	49.15	0.07	8.91	0.36	9.36	0.30	0.36	0.74				0.32	0.01	7,648.62

## 3.0 Construction Detail

### 3.1 Mitigation Measures Construction

Water Exposed Area

### 3.2 Demolition - 2012

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.13	0.00	1.13	0.00	0.00	0.00						0.00
Off-Road	3.28	26.93	14.99	0.02		1.31	1.31		1.31	1.31				0.29		2,534.35
Total	3.28	26.93	14.99	0.02	1.13	1.31	2.44	0.00	1.31	1.31				0.29		2,534.35



### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Worker	0.03	0.04	0.34	0.00	0.08	0.00	0.08	0.00	0.00	0.01				0.00		58.21
<b>Total</b>	<b>0.03</b>	<b>0.04</b>	<b>0.34</b>	<b>0.00</b>	<b>0.08</b>	<b>0.00</b>	<b>0.08</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>				<b>0.00</b>		<b>58.21</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.51	0.00	0.51	0.00	0.00	0.00						0.00
Off-Road	3.28	26.93	14.99	0.02		1.31	1.31		1.31	1.31				0.29		2,534.35
<b>Total</b>	<b>3.28</b>	<b>26.93</b>	<b>14.99</b>	<b>0.02</b>	<b>0.51</b>	<b>1.31</b>	<b>1.82</b>	<b>0.00</b>	<b>1.31</b>	<b>1.31</b>				<b>0.29</b>		<b>2,534.35</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Worker	0.03	0.04	0.34	0.00	0.08	0.00	0.08	0.00	0.00	0.01				0.00		58.21
<b>Total</b>	<b>0.03</b>	<b>0.04</b>	<b>0.34</b>	<b>0.00</b>	<b>0.08</b>	<b>0.00</b>	<b>0.08</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>				<b>0.00</b>		<b>58.21</b>

### 3.3 Grading - 2012

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.06	0.00	6.06	3.31	0.00	3.31						0.00
Off-Road	7.90	68.66	33.60	0.06		2.94	2.94		2.94	2.94				0.71		6,969.72
<b>Total</b>	<b>7.90</b>	<b>68.66</b>	<b>33.60</b>	<b>0.06</b>	<b>6.06</b>	<b>2.94</b>	<b>9.00</b>	<b>3.31</b>	<b>2.94</b>	<b>6.25</b>				<b>0.71</b>		<b>6,969.72</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Worker	0.07	0.07	0.69	0.00	0.15	0.00	0.16	0.01	0.00	0.01				0.01		116.43
<b>Total</b>	<b>0.07</b>	<b>0.07</b>	<b>0.69</b>	<b>0.00</b>	<b>0.15</b>	<b>0.00</b>	<b>0.16</b>	<b>0.01</b>	<b>0.00</b>	<b>0.01</b>				<b>0.01</b>		<b>116.43</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.73	0.00	2.73	1.49	0.00	1.49						0.00
Off-Road	7.90	68.66	33.60	0.06		2.94	2.94		2.94	2.94				0.71		6,969.72
<b>Total</b>	<b>7.90</b>	<b>68.66</b>	<b>33.60</b>	<b>0.06</b>	<b>2.73</b>	<b>2.94</b>	<b>5.67</b>	<b>1.49</b>	<b>2.94</b>	<b>4.43</b>				<b>0.71</b>		<b>6,969.72</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Worker	0.07	0.07	0.69	0.00	0.15	0.00	0.16	0.01	0.00	0.01				0.01		116.43
<b>Total</b>	<b>0.07</b>	<b>0.07</b>	<b>0.69</b>	<b>0.00</b>	<b>0.15</b>	<b>0.00</b>	<b>0.16</b>	<b>0.01</b>	<b>0.00</b>	<b>0.01</b>				<b>0.01</b>		<b>116.43</b>

### **3.4 Utilities - 2013**

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.14	8.08	6.11	0.01		0.54	0.54		0.54	0.54				0.10		984.06
<b>Total</b>	<b>1.14</b>	<b>8.08</b>	<b>6.11</b>	<b>0.01</b>		<b>0.54</b>	<b>0.54</b>		<b>0.54</b>	<b>0.54</b>				<b>0.10</b>		<b>984.06</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Worker	0.03	0.03	0.32	0.00	0.08	0.00	0.08	0.00	0.00	0.01				0.00		56.96
<b>Total</b>	<b>0.03</b>	<b>0.03</b>	<b>0.32</b>	<b>0.00</b>	<b>0.08</b>	<b>0.00</b>	<b>0.08</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>				<b>0.00</b>		<b>56.96</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.14	8.08	6.11	0.01		0.54	0.54		0.54	0.54				0.10		984.06
<b>Total</b>	<b>1.14</b>	<b>8.08</b>	<b>6.11</b>	<b>0.01</b>		<b>0.54</b>	<b>0.54</b>		<b>0.54</b>	<b>0.54</b>				<b>0.10</b>		<b>984.06</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Worker	0.03	0.03	0.32	0.00	0.08	0.00	0.08	0.00	0.00	0.01				0.00		56.96
<b>Total</b>	<b>0.03</b>	<b>0.03</b>	<b>0.32</b>	<b>0.00</b>	<b>0.08</b>	<b>0.00</b>	<b>0.08</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>				<b>0.00</b>		<b>56.96</b>

### **3.5 Building Construction - 2013**

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.51	14.69	13.26	0.02		1.13	1.13		1.13	1.13				0.31		1,721.60
<b>Total</b>	<b>3.51</b>	<b>14.69</b>	<b>13.26</b>	<b>0.02</b>		<b>1.13</b>	<b>1.13</b>		<b>1.13</b>	<b>1.13</b>				<b>0.31</b>		<b>1,721.60</b>

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.43	4.73	3.29	0.01	0.27	0.15	0.42	0.02	0.15	0.17				0.02		777.27
Worker	0.79	0.85	7.96	0.01	1.93	0.06	1.99	0.07	0.06	0.13				0.08		1,435.40
<b>Total</b>	<b>1.22</b>	<b>5.58</b>	<b>11.25</b>	<b>0.02</b>	<b>2.20</b>	<b>0.21</b>	<b>2.41</b>	<b>0.09</b>	<b>0.21</b>	<b>0.30</b>				<b>0.10</b>		<b>2,212.67</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.51	14.69	13.26	0.02		1.13	1.13		1.13	1.13				0.31		1,721.60
<b>Total</b>	<b>3.51</b>	<b>14.69</b>	<b>13.26</b>	<b>0.02</b>		<b>1.13</b>	<b>1.13</b>		<b>1.13</b>	<b>1.13</b>				<b>0.31</b>		<b>1,721.60</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.43	4.73	3.29	0.01	0.27	0.15	0.42	0.02	0.15	0.17				0.02		777.27
Worker	0.79	0.85	7.96	0.01	1.93	0.06	1.99	0.07	0.06	0.13				0.08		1,435.40
<b>Total</b>	<b>1.22</b>	<b>5.58</b>	<b>11.25</b>	<b>0.02</b>	<b>2.20</b>	<b>0.21</b>	<b>2.41</b>	<b>0.09</b>	<b>0.21</b>	<b>0.30</b>				<b>0.10</b>		<b>2,212.67</b>

### 3.5 Building Construction - 2014

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.18	13.74	13.01	0.02		1.01	1.01		1.01	1.01				0.29		1,721.00
<b>Total</b>	<b>3.18</b>	<b>13.74</b>	<b>13.01</b>	<b>0.02</b>		<b>1.01</b>	<b>1.01</b>		<b>1.01</b>	<b>1.01</b>				<b>0.29</b>		<b>1,721.00</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.40	4.27	3.03	0.01	0.27	0.14	0.41	0.02	0.14	0.16				0.02		779.91
Worker	0.74	0.77	7.34	0.01	1.93	0.06	2.00	0.07	0.06	0.13				0.08		1,407.40
<b>Total</b>	<b>1.14</b>	<b>5.04</b>	<b>10.37</b>	<b>0.02</b>	<b>2.20</b>	<b>0.20</b>	<b>2.41</b>	<b>0.09</b>	<b>0.20</b>	<b>0.29</b>				<b>0.10</b>		<b>2,187.31</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.18	13.74	13.01	0.02		1.01	1.01		1.01	1.01				0.29		1,721.00
<b>Total</b>	<b>3.18</b>	<b>13.74</b>	<b>13.01</b>	<b>0.02</b>		<b>1.01</b>	<b>1.01</b>		<b>1.01</b>	<b>1.01</b>				<b>0.29</b>		<b>1,721.00</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.40	4.27	3.03	0.01	0.27	0.14	0.41	0.02	0.14	0.16				0.02		779.91
Worker	0.74	0.77	7.34	0.01	1.93	0.06	2.00	0.07	0.06	0.13				0.08		1,407.40
Total	1.14	5.04	10.37	0.02	2.20	0.20	2.41	0.09	0.20	0.29				0.10		2,187.31

### 3.6 Paving - 2013

### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.51	15.69	10.41	0.02		1.33	1.33		1.33	1.33				0.22		1,491.87
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	2.51	15.69	10.41	0.02		1.33	1.33		1.33	1.33				0.22		1,491.87

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Worker	0.06	0.07	0.63	0.00	0.15	0.00	0.16	0.01	0.00	0.01				0.01		113.92
Total	0.06	0.07	0.63	0.00	0.15	0.00	0.16	0.01	0.00	0.01				0.01		113.92

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.51	15.69	10.41	0.02		1.33	1.33		1.33	1.33				0.22		1,491.87
Paving	0.00					0.00	0.00		0.00	0.00						0.00
<b>Total</b>	<b>2.51</b>	<b>15.69</b>	<b>10.41</b>	<b>0.02</b>		<b>1.33</b>	<b>1.33</b>		<b>1.33</b>	<b>1.33</b>				<b>0.22</b>		<b>1,491.87</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Worker	0.06	0.07	0.63	0.00	0.15	0.00	0.16	0.01	0.00	0.01				0.01		113.92
<b>Total</b>	<b>0.06</b>	<b>0.07</b>	<b>0.63</b>	<b>0.00</b>	<b>0.15</b>	<b>0.00</b>	<b>0.16</b>	<b>0.01</b>	<b>0.00</b>	<b>0.01</b>				<b>0.01</b>		<b>113.92</b>

## 3.7 Architectural Coating - 2014

### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	50.51					0.00	0.00		0.00	0.00						0.00
Off-Road	0.45	2.77	1.92	0.00		0.24	0.24		0.24	0.24				0.04		282.03
<b>Total</b>	<b>50.96</b>	<b>2.77</b>	<b>1.92</b>	<b>0.00</b>		<b>0.24</b>	<b>0.24</b>		<b>0.24</b>	<b>0.24</b>				<b>0.04</b>		<b>282.03</b>



### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Worker	0.15	0.15	1.46	0.00	0.38	0.01	0.40	0.01	0.01	0.03				0.02		279.25
<b>Total</b>	<b>0.15</b>	<b>0.15</b>	<b>1.46</b>	<b>0.00</b>	<b>0.38</b>	<b>0.01</b>	<b>0.40</b>	<b>0.01</b>	<b>0.01</b>	<b>0.03</b>				<b>0.02</b>		<b>279.25</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	50.51					0.00	0.00		0.00	0.00						0.00
Off-Road	0.45	2.77	1.92	0.00		0.24	0.24		0.24	0.24				0.04		282.03
<b>Total</b>	<b>50.96</b>	<b>2.77</b>	<b>1.92</b>	<b>0.00</b>		<b>0.24</b>	<b>0.24</b>		<b>0.24</b>	<b>0.24</b>				<b>0.04</b>		<b>282.03</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Worker	0.15	0.15	1.46	0.00	0.38	0.01	0.40	0.01	0.01	0.03				0.02		279.25
<b>Total</b>	<b>0.15</b>	<b>0.15</b>	<b>1.46</b>	<b>0.00</b>	<b>0.38</b>	<b>0.01</b>	<b>0.40</b>	<b>0.01</b>	<b>0.01</b>	<b>0.03</b>				<b>0.02</b>		<b>279.25</b>

## 4.0 Mobile Detail

### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.29	8.23	39.39	0.07	8.91	0.36	9.28	0.30	0.36	0.66				0.29		7,192.51
Unmitigated	4.29	8.23	39.39	0.07	8.91	0.36	9.28	0.30	0.36	0.66				0.29		7,192.51
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	751.45	809.08	685.91	2,498,997	2,498,997
Parking Structure	0.00	0.00	0.00		
Total	751.45	809.08	685.91	2,498,997	2,498,997

### 4.3 Trip Type Information

Land Use	Miles			Trip %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Apartments Mid Rise	12.70	7.00	9.50	40.20	19.20	40.60
Parking Structure	8.90	13.30	7.40	0.00	0.00	0.00

## 5.0 Energy Detail

### 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.04	0.34	0.15	0.00		0.00	0.03		0.00	0.03				0.01	0.01	438.75
NaturalGas Unmitigated	0.04	0.34	0.15	0.00		0.00	0.03		0.00	0.03				0.01	0.01	438.75
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

### 5.2 Energy by Land Use - NaturalGas

#### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Apartments Mid Rise	3706.8	0.04	0.34	0.15	0.00		0.00	0.03		0.00	0.03				0.01	0.01	438.75
Parking Structure	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00				0.00	0.00	0.00
Total		0.04	0.34	0.15	0.00		0.00	0.03		0.00	0.03				0.01	0.01	438.75

#### Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Apartments Mid Rise	3,706.8	0.04	0.34	0.15	0.00		0.00	0.03		0.00	0.03				0.01	0.01	438.75
Parking Structure	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00				0.00	0.00	0.00
Total		0.04	0.34	0.15	0.00		0.00	0.03		0.00	0.03				0.01	0.01	438.75

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.55	0.11	9.61	0.00		0.00	0.05		0.00	0.05				0.02	0.00	17.36
Unmitigated	5.55	0.11	9.61	0.00		0.00	0.05		0.00	0.05				0.02	0.00	17.36
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

### 6.2 Area by SubCategory

#### Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.91					0.00	0.00		0.00	0.00						0.00
Consumer Products	4.33					0.00	0.00		0.00	0.00						0.00
Hearth	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00				0.00	0.00	0.00
Landscaping	0.31	0.11	9.61	0.00		0.00	0.05		0.00	0.05				0.02		17.36
Total	5.55	0.11	9.61	0.00		0.00	0.05		0.00	0.05				0.02	0.00	17.36

#### Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.91					0.00	0.00		0.00	0.00						0.00
Consumer Products	4.33					0.00	0.00		0.00	0.00						0.00
Hearth	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00				0.00	0.00	0.00
Landscaping	0.31	0.11	9.61	0.00		0.00	0.05		0.00	0.05				0.02		17.36
Total	5.55	0.11	9.61	0.00		0.00	0.05		0.00	0.05				0.02	0.00	17.36

**Pacific Gateway Project - Costa Mesa**  
**Orange County, Summer**

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric
Parking Structure	283	Space
Apartments Mid Rise	113	Dwelling Unit

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>		<b>Utility Company</b>	Southern California Edison
<b>Climate Zone</b>	8		2.2		
		<b>Precipitation Freq (Days)</b>			

### 1.3 User Entered Comments

30

Project Characteristics - Operational end of December 2014; use 2015

Land Use - Per project description, garage area 105,832 sf

Acreage 1.8 for res; 0.69 for garage for 2.49 total

Construction Phase - Demo 9/4-30/2012; grad 10/1-12/31/2012; util 1/1-2/28/2013

Build 3/1/2013-10/30/2014; pave 4/15-19/2013; paint 9/15-12/15/2014

Off-road Equipment -

Off-road Equipment - Bldg - no crane or generator

Off-road Equipment - Demo- Pulverizer (dozer is surrogate), loader

Off-road Equipment - Grade-2 scraper, dozer, grader

Off-road Equipment - Pave 1 paver, 1, roller, 1 loader

Off-road Equipment - Util- 1 excavator, 1 loader, 6hr/day

Trips and VMT - No demo hauling; asphalt reused on site

Demolition -

Grading - grade 2.49 acre; no export or import

Vehicle Trips - Weekday trip rate 6.65 per traffic study

Woodstoves - No fireplaces

Construction Off-road Equipment Mitigation -

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2012	7.96	68.73	34.32	0.06	6.22	2.94	9.16	3.32	2.94	6.26			0.00	0.72	0.00	7,094.25
2013	7.21	35.66	35.70	0.06	2.36	2.68	5.04	0.10	2.68	2.78			0.00	0.65	0.00	5,652.39
2014	55.33	21.39	26.95	0.05	2.59	1.47	4.05	0.11	1.47	1.57			0.00	0.44	0.00	4,591.73
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2012	7.96	68.73	34.32	0.06	2.88	2.94	5.82	1.50	2.94	4.44			0.00	0.72	0.00	7,094.25
2013	7.21	35.66	35.70	0.06	2.36	2.68	5.04	0.10	2.68	2.78			0.00	0.65	0.00	5,652.39
2014	55.33	21.39	28.95	0.05	2.59	1.47	4.05	0.11	1.47	1.57			0.00	0.44	0.00	4,591.73
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

## 2.2 Overall Operational

### Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.55	0.11	9.61	0.00		0.00	0.05		0.00	0.05				0.02	0.00	17.36
Energy	0.04	0.34	0.15	0.00		0.00	0.03		0.00	0.03				0.01	0.01	438.75
Mobile	4.00	7.48	40.35	0.08	8.91	0.36	9.27	0.30	0.36	0.66				0.30		7,620.59
Total	9.59	7.93	50.11	0.08	8.91	0.36	9.35	0.30	0.36	0.74				0.33	0.01	8,076.70

### Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.55	0.11	9.61	0.00		0.00	0.05		0.00	0.05				0.02	0.00	17.36
Energy	0.04	0.34	0.15	0.00		0.00	0.03		0.00	0.03				0.01	0.01	438.75
Mobile	4.00	7.48	40.35	0.08	8.91	0.36	9.27	0.30	0.36	0.66				0.30		7,620.59
<b>Total</b>	<b>9.59</b>	<b>7.93</b>	<b>50.11</b>	<b>0.08</b>	<b>8.91</b>	<b>0.36</b>	<b>9.35</b>	<b>0.30</b>	<b>0.36</b>	<b>0.74</b>				<b>0.33</b>	<b>0.01</b>	<b>8,076.70</b>

## 3.0 Construction Detail

### 3.1 Mitigation Measures Construction

Water Exposed Area

### 3.2 Demolition - 2012

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.13	0.00	1.13	0.00	0.00	0.00						0.00
Off-Road	3.28	26.93	14.99	0.02		1.31	1.31		1.31	1.31				0.29		2,534.35
<b>Total</b>	<b>3.28</b>	<b>26.93</b>	<b>14.99</b>	<b>0.02</b>	<b>1.13</b>	<b>1.31</b>	<b>2.44</b>	<b>0.00</b>	<b>1.31</b>	<b>1.31</b>				<b>0.29</b>		<b>2,534.35</b>



**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Worker	0.03	0.03	0.36	0.00	0.08	0.00	0.08	0.00	0.00	0.01				0.00		62.26
<b>Total</b>	<b>0.03</b>	<b>0.03</b>	<b>0.36</b>	<b>0.00</b>	<b>0.08</b>	<b>0.00</b>	<b>0.08</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>				<b>0.00</b>		<b>62.26</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.51	0.00	0.51	0.00	0.00	0.00						0.00
Off-Road	3.28	26.93	14.99	0.02		1.31	1.31		1.31	1.31				0.29		2,534.35
<b>Total</b>	<b>3.28</b>	<b>26.93</b>	<b>14.99</b>	<b>0.02</b>	<b>0.51</b>	<b>1.31</b>	<b>1.82</b>	<b>0.00</b>	<b>1.31</b>	<b>1.31</b>				<b>0.29</b>		<b>2,534.35</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Worker	0.03	0.03	0.36	0.00	0.08	0.00	0.08	0.00	0.00	0.01				0.00		62.26
Total	0.03	0.03	0.36	0.00	0.08	0.00	0.08	0.00	0.00	0.01				0.00		62.26

### 3.3 Grading - 2012

### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.06	0.00	6.06	3.31	0.00	3.31						0.00
Off-Road	7.90	68.66	33.60	0.06		2.94	2.94		2.94	2.94				0.71		6,969.72
Total	7.90	68.66	33.60	0.06	6.06	2.94	9.00	3.31	2.94	6.25				0.71		6,969.72

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Worker	0.06	0.06	0.72	0.00	0.15	0.00	0.16	0.01	0.00	0.01				0.01		124.52
<b>Total</b>	<b>0.06</b>	<b>0.06</b>	<b>0.72</b>	<b>0.00</b>	<b>0.15</b>	<b>0.00</b>	<b>0.16</b>	<b>0.01</b>	<b>0.00</b>	<b>0.01</b>				<b>0.01</b>		<b>124.52</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.73	0.00	2.73	1.49	0.00	1.49						0.00
Off-Road	7.90	68.66	33.60	0.06		2.94	2.94		2.94	2.94				0.71		6,969.72
<b>Total</b>	<b>7.90</b>	<b>68.66</b>	<b>33.60</b>	<b>0.06</b>	<b>2.73</b>	<b>2.94</b>	<b>5.67</b>	<b>1.49</b>	<b>2.94</b>	<b>4.43</b>				<b>0.71</b>		<b>6,969.72</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Worker	0.06	0.06	0.72	0.00	0.15	0.00	0.16	0.01	0.00	0.01				0.01		124.52
Total	0.06	0.06	0.72	0.00	0.15	0.00	0.16	0.01	0.00	0.01				0.01		124.52

### 3.4 Utilities - 2013

### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.14	8.08	6.11	0.01		0.54	0.54		0.54	0.54				0.10		984.06
Total	1.14	8.08	6.11	0.01		0.54	0.54		0.54	0.54				0.10		984.06

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Worker	0.03	0.03	0.33	0.00	0.08	0.00	0.08	0.00	0.00	0.01				0.00		60.93
Total	0.03	0.03	0.33	0.00	0.08	0.00	0.08	0.00	0.00	0.01				0.00		60.93

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.14	8.08	6.11	0.01		0.54	0.54		0.54	0.54				0.10		984.06
Total	1.14	8.08	6.11	0.01		0.54	0.54		0.54	0.54				0.10		984.06

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Worker	0.03	0.03	0.33	0.00	0.08	0.00	0.08	0.00	0.00	0.01				0.00		60.93
Total	0.03	0.03	0.33	0.00	0.08	0.00	0.08	0.00	0.00	0.01				0.00		60.93

### 3.5 Building Construction - 2013

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.51	14.69	13.26	0.02		1.13	1.13		1.13	1.13				0.31		1,721.60
Total	3.51	14.69	13.26	0.02		1.13	1.13		1.13	1.13				0.31		1,721.60

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.41	4.49	2.98	0.01	0.27	0.15	0.42	0.02	0.15	0.17				0.02		781.74
Worker	0.72	0.74	8.39	0.02	1.93	0.06	1.99	0.07	0.06	0.13				0.08		1,535.32
Total	1.13	5.23	11.37	0.03	2.20	0.21	2.41	0.09	0.21	0.30				0.10		2,317.06

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.51	14.69	13.26	0.02		1.13	1.13		1.13	1.13				0.31		1,721.60
Total	3.51	14.69	13.26	0.02		1.13	1.13		1.13	1.13				0.31		1,721.60

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.41	4.49	2.98	0.01	0.27	0.15	0.42	0.02	0.15	0.17				0.02		781.74
Worker	0.72	0.74	8.39	0.02	1.93	0.06	1.99	0.07	0.06	0.13				0.08		1,535.32
Total	1.13	5.23	11.37	0.03	2.20	0.21	2.41	0.09	0.21	0.30				0.10		2,317.06

### 3.5 Building Construction - 2014

### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.18	13.74	13.01	0.02		1.01	1.01		1.01	1.01				0.29		1,721.00
Total	3.18	13.74	13.01	0.02		1.01	1.01		1.01	1.01				0.29		1,721.00



### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.38	4.07	2.72	0.01	0.27	0.13	0.40	0.02	0.13	0.15				0.02		784.58
Worker	0.68	0.67	7.76	0.02	1.93	0.06	2.00	0.07	0.06	0.13				0.08		1,505.42
<b>Total</b>	<b>1.06</b>	<b>4.74</b>	<b>10.48</b>	<b>0.03</b>	<b>2.20</b>	<b>0.19</b>	<b>2.40</b>	<b>0.09</b>	<b>0.19</b>	<b>0.28</b>				<b>0.10</b>		<b>2,290.00</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.18	13.74	13.01	0.02		1.01	1.01		1.01	1.01				0.29		1,721.00
<b>Total</b>	<b>3.18</b>	<b>13.74</b>	<b>13.01</b>	<b>0.02</b>		<b>1.01</b>	<b>1.01</b>		<b>1.01</b>	<b>1.01</b>				<b>0.29</b>		<b>1,721.00</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.38	4.07	2.72	0.01	0.27	0.13	0.40	0.02	0.13	0.15				0.02		784.58
Worker	0.68	0.67	7.76	0.02	1.93	0.06	2.00	0.07	0.06	0.13				0.08		1,505.42
Total	1.06	4.74	10.48	0.03	2.20	0.19	2.40	0.09	0.19	0.28				0.10		2,290.00

### 3.6 Paving - 2013

### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.51	15.69	10.41	0.02		1.33	1.33		1.33	1.33				0.22		1,491.87
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	2.51	15.69	10.41	0.02		1.33	1.33		1.33	1.33				0.22		1,491.87

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Worker	0.06	0.06	0.67	0.00	0.15	0.00	0.16	0.01	0.00	0.01				0.01		121.85
<b>Total</b>	<b>0.06</b>	<b>0.06</b>	<b>0.67</b>	<b>0.00</b>	<b>0.15</b>	<b>0.00</b>	<b>0.16</b>	<b>0.01</b>	<b>0.00</b>	<b>0.01</b>				<b>0.01</b>		<b>121.85</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.51	15.69	10.41	0.02		1.33	1.33		1.33	1.33				0.22		1,491.87
Paving	0.00					0.00	0.00		0.00	0.00						0.00
<b>Total</b>	<b>2.51</b>	<b>15.69</b>	<b>10.41</b>	<b>0.02</b>		<b>1.33</b>	<b>1.33</b>		<b>1.33</b>	<b>1.33</b>				<b>0.22</b>		<b>1,491.87</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Worker	0.06	0.06	0.67	0.00	0.15	0.00	0.16	0.01	0.00	0.01				0.01		121.85
Total	0.06	0.06	0.67	0.00	0.15	0.00	0.16	0.01	0.00	0.01				0.01		121.85

### 3.7 Architectural Coating - 2014

### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	50.51					0.00	0.00		0.00	0.00						0.00
Off-Road	0.45	2.77	1.92	0.00		0.24	0.24		0.24	0.24				0.04		282.03
Total	50.96	2.77	1.92	0.00		0.24	0.24		0.24	0.24				0.04		282.03

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Worker	0.13	0.13	1.54	0.00	0.38	0.01	0.40	0.01	0.01	0.03				0.02		298.70
<b>Total</b>	<b>0.13</b>	<b>0.13</b>	<b>1.54</b>	<b>0.00</b>	<b>0.38</b>	<b>0.01</b>	<b>0.40</b>	<b>0.01</b>	<b>0.01</b>	<b>0.03</b>				<b>0.02</b>		<b>298.70</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	50.51					0.00	0.00		0.00	0.00						0.00
Off-Road	0.45	2.77	1.92	0.00		0.24	0.24		0.24	0.24				0.04		282.03
<b>Total</b>	<b>50.96</b>	<b>2.77</b>	<b>1.92</b>	<b>0.00</b>		<b>0.24</b>	<b>0.24</b>		<b>0.24</b>	<b>0.24</b>				<b>0.04</b>		<b>282.03</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00
Worker	0.13	0.13	1.54	0.00	0.38	0.01	0.40	0.01	0.01	0.03				0.02		298.70
Total	0.13	0.13	1.54	0.00	0.38	0.01	0.40	0.01	0.01	0.03				0.02		298.70

## 4.0 Mobile Detail

### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.00	7.48	40.35	0.08	8.91	0.36	9.27	0.30	0.36	0.66				0.30		7,620.59
Unmitigated	4.00	7.48	40.35	0.08	8.91	0.36	9.27	0.30	0.36	0.66				0.30		7,620.59
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

#### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	751.45	809.08	685.91	2,498,997	2,498,997
Parking Structure	0.00	0.00	0.00		
Total	751.45	809.08	685.91	2,498,997	2,498,997

#### 4.3 Trip Type Information

Land Use	Miles			Trip %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Apartments Mid Rise	12.70	7.00	9.50	40.20	19.20	40.60
Parking Structure	8.90	13.30	7.40	0.00	0.00	0.00

### 5.0 Energy Detail

#### 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.04	0.34	0.15	0.00		0.00	0.03		0.00	0.03				0.01	0.01	438.75
NaturalGas Unmitigated	0.04	0.34	0.15	0.00		0.00	0.03		0.00	0.03				0.01	0.01	438.75
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Apartments Mid Rise	3706.8	0.04	0.34	0.15	0.00		0.00	0.03		0.00	0.03				0.01	0.01	438.75
Parking Structure	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00				0.00	0.00	0.00
<b>Total</b>		<b>0.04</b>	<b>0.34</b>	<b>0.15</b>	<b>0.00</b>		<b>0.00</b>	<b>0.03</b>		<b>0.00</b>	<b>0.03</b>				<b>0.01</b>	<b>0.01</b>	<b>438.75</b>

### Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Apartments Mid Rise	3.7068	0.04	0.34	0.15	0.00		0.00	0.03		0.00	0.03				0.01	0.01	438.75
Parking Structure	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00				0.00	0.00	0.00
<b>Total</b>		<b>0.04</b>	<b>0.34</b>	<b>0.15</b>	<b>0.00</b>		<b>0.00</b>	<b>0.03</b>		<b>0.00</b>	<b>0.03</b>				<b>0.01</b>	<b>0.01</b>	<b>438.75</b>



## 6.0 Area Detail

### 6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.55	0.11	9.61	0.00		0.00	0.05		0.00	0.05				0.02	0.00	17.36
Unmitigated	5.55	0.11	9.61	0.00		0.00	0.05		0.00	0.05				0.02	0.00	17.36
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

### 6.2 Area by SubCategory

#### Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.91					0.00	0.00		0.00	0.00						0.00
Consumer Products	4.33					0.00	0.00		0.00	0.00						0.00
Hearth	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00				0.00	0.00	0.00
Landscaping	0.31	0.11	9.61	0.00		0.00	0.05		0.00	0.05				0.02		17.36
Total	5.55	0.11	9.61	0.00		0.00	0.05		0.00	0.05				0.02	0.00	17.36

#### Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.91					0.00	0.00		0.00	0.00						0.00
Consumer Products	4.33					0.00	0.00		0.00	0.00						0.00
Hearth	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00				0.00	0.00	0.00
Landscaping	0.31	0.11	9.61	0.00		0.00	0.05		0.00	0.05				0.02		17.36
Total	5.55	0.11	9.61	0.00		0.00	0.05		0.00	0.05				0.02	0.00	17.36

**APPENDIX C**  
**TRAFFIC MEMORANDUM**





**Stantec**

**Stantec Consulting Services Inc.**  
19 Technology Drive Suite 200  
Irvine CA 92618-2334  
Tel: (949) 923-6000  
Fax: (949) 923-6121

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January 31, 2012  
File: 2073006680

BonTerra Consulting  
2 Executive Circle, Suite 175  
Irvine CA 92614

**Attention: Jennifer Marks**

**Reference: Pacific Gateway Apartment Conversion Traffic Impact Comparison**

Dear Jennifer:

Stantec Consulting Services Inc. has prepared an analysis of the trip generation and project access of the proposed Pacific Gateway Apartments in the City of Costa Mesa. This letter summarizes the results of our investigation.

The project consists of 113 apartment units located on the south side of Bernard Street east of Harbor Boulevard. The project site was previously approved for a total of 161 condominium units of which 113 units have not been built. The project is currently proposing to construct the remaining 113 units as rental apartments instead of the originally proposed residential condominiums. The original traffic analysis (prepared by Austin-Foust Associates, Inc. in 2002) applied the Costa Mesa Traffic Model (CMTM) High Density Residential trip rates to the condominium project. The same CMTM High Density Residential trip rates would have been applied if the original project had consisted of apartments instead of the residential condominiums, and the resulting trip generation would have been the same as the residential condominiums. In comparison, application of the most recent Institute of Transportation Engineers (ITE) Trip Generation, 8<sup>th</sup> Edition Apartment trip rates to the currently proposed 113 apartments results in a decrease of three trips in the AM peak hour and a decrease of four trips in the PM peak hour, with a total daily decrease of 23 trips (see Table 1).

The difference between the assumptions in the original traffic analysis and the current analysis is a very minor change in the access and the distribution of project traffic to Bernard Street. The original traffic analysis assumed a connection to 19<sup>th</sup> Street which is no longer available to the proposed project. A small amount of project traffic was assigned to this connection in the original study; however, the use of this access was minimal since the intersection with 19<sup>th</sup> Street was limited to right-turns only. The trip generation and the overall distribution are virtually unchanged from the original study.

Access to the current apartment project will be provided by a single driveway on Bernard Street east of Harbor Boulevard. The total driveway volume is estimated to be 57 AM peak hour trips (11 inbound, 46 outbound), 70 PM peak hour trips (45 inbound, 25 outbound), and 751 daily trips. Approximately 75 percent of the trips are estimated to travel on Bernard Street to/from Harbor Boulevard, and approximately 25 percent are estimated to travel on Parsons Street (see Figure 1). The driveway is slightly offset to the west from the existing Toyota dealership service department driveway creating a potential conflict between left turns into and out of the car dealership driveway and the project driveway; however, the expected traffic volumes from the proposed project are low enough not to create a significant problem on this low volume, low speed street. For example, during the AM peak hour, approximately 35 vehicles are estimated to exit the project driveway

January 31, 2012  
Jennifer Marks  
Page 2 of 4

**Reference: Pacific Gateway Apartment Conversion Traffic Impact Comparison**

via a northbound left turn toward the west. This is an average of approximately one vehicle every two minutes. The PM peak hour left-turn volume is estimated to be even lower, approximately 20 vehicles (i.e., one vehicle every three minutes). Inbound project trips from Parsons Street entering via a left turn from westbound Bernard Street are estimated to be fewer than 10 trips during the AM or PM peak hour. These low volumes are not expected to create a significant conflict with vehicles entering and exiting the car dealership driveway.

In conclusion, the trip generation, distribution, and impacts from the proposed apartment project have not significantly changed from the original condominium/townhouse project analyzed in 2002. The conclusions from the original analysis are still valid, and the project is not expected to have a significant impact on the circulation system.

Sincerely,

**STANTEC CONSULTING SERVICES INC.**



Cathy Lawrence, P.E.  
Transportation Engineer  
Tel: (949) 923-6064  
Cathy.Lawrence@stantec.com

Attachments: Table 1 – Trip Generation and Trip Rate Summary  
Figure 1 – Project Peak Hour Trips

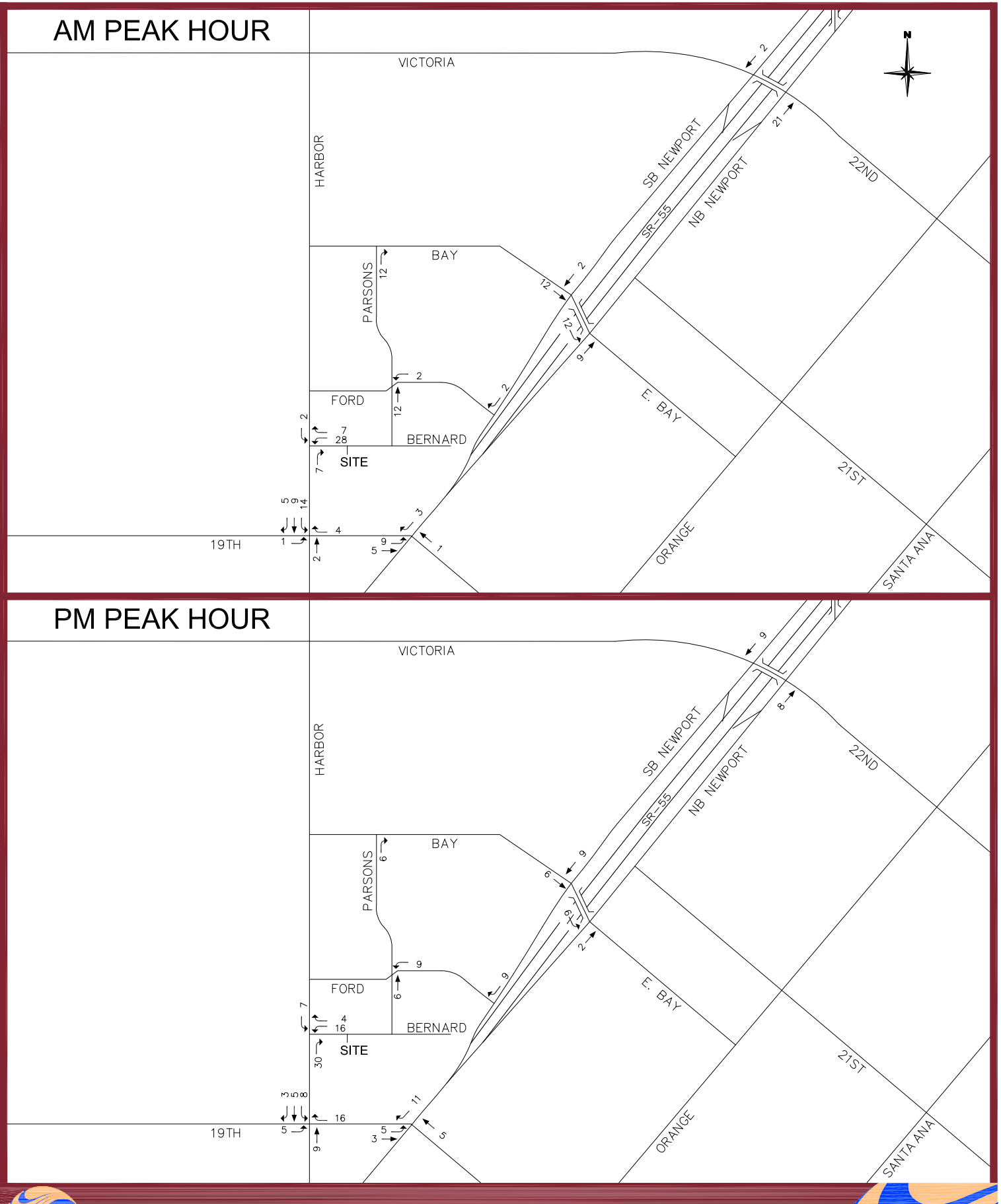
c. Raja Sethuraman, City of Costa Mesa

# ATTACHMENTS

**Table 1 Trip Generation and Trip Rate Summary**

Land Use	Amount	AM Peak Hour			PM Peak Hour			ADT
		In	Out	Total	In	Out	Total	
Trip Generation								
Approved – High Density Residential	113 DU	10	50	60	49	25	74	774
Proposed – Apartments	113 DU	11	46	57	45	25	70	751
Trip Rates								
High Density Residential <sup>1</sup>	DU	.09	.44	.53	.43	.22	.65	6.85
Apartment <sup>2</sup>	DU	.10	.41	.51	.40	.22	.62	6.65
Notes: <sup>1</sup> Costa Mesa Traffic Model (CMTM) High Density Residential rate (blend of ITE rates 210, 220 & 231) <sup>2</sup> Institute of Transportation Engineers (ITE) Apartment rate (220), Trip Generation, 8 <sup>th</sup> Edition, 2008								

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Peak Hour Project Trips

Figure 1



Stantec



